International Council of Accreditation
Standards for Accreditation

Introduction to the Standards and Criteria for Accreditation

The Standards and Criteria are the basis for accreditation of educational programs for allied ophthalmic personnel (AOP). Definitions/designations for each type of AOP are listed on pages seven and eight. The term "Standards" refers to the minimum requirements for accrediting AOP training programs. All requirements an accredited program is held accountable to are in the Standards.

The accreditation process strives for high quality patient care by maintaining national and international educational standards for AOP. The Standards have the following characteristics:

1. Standards are qualitative not quantitative. There are no arbitrary numerical indicators.
2. Standards are broad on purpose. They must apply to many different types of programs and institutions. It is the program's responsibility to create a program that adheres to the Standards. There is no template for an accredited program.
3. Standards are expected to acknowledge and respect the basic right of institutions to be self-defining and self-determining.
4. Standards represent prescriptive rather than proscriptive requirements that are acceptable to the communities of interest that use the Standards.
5. Standards are designed to allow for quality, continuity, flexibility, and are not directly correlated to the IJCAHPO certification examinations.

Introduction to ICA

The International Council of Accreditation (ICA) provides accreditation to allied ophthalmic educational training programs. These programs are conducted as defined in the Individual Institution criteria below. The Standards against which these programs are measured are developed by ophthalmic professionals and reflect what is necessary to be able to function successfully within the profession.

Accreditation emphasizes learning quality, responsibility, and improvement through a process of reflection and analysis. These Standards are to be used for the development, evaluation, and self-analysis of allied ophthalmic education and training programs, and are not directly correlated to the International Joint Commission on Allied Health Personnel in Ophthalmology (IJCAHPO) certification examinations.

Accreditation applies only to institutions and programs; individuals cannot be accredited. Individuals can only be certified.

Individual Institution

A sponsoring institution must meet at least one of the following criteria:

1. A postsecondary academic institution accredited by a national, state or provincial accrediting agency that is recognized by a national governmental department or ministry of education, or applicable authority, and is authorized under applicable law, or other acceptable authority, to provide a postsecondary program which awards a minimum of a certificate at the completion of the program.
2. A hospital, medical center, branch of the Armed Forces, or other government education or medical service, which meets the standards of a national, state or provincial accrediting agency that is recognized by a national governmental department or ministry of education, or applicable authority to offer postsecondary education.
3. A secondary academic institution accredited by a national, state or provincial accrediting agency that is recognized by a national governmental department or ministry of education, or applicable authority (Ophthalmic Non-Clinical Assistant Programs only).

Consortium

1. A consortium sponsor is an entity consisting of two or more institutions that exist for the purpose of operating an education program. In such instances, at least one of the members of the consortium must meet the requirements of a sponsoring educational institution as described under Individual Institution.
2. The responsibilities of each member of the consortium must be clearly documented as a formal affiliation agreement or memorandum of understanding, which includes governance and lines of authority.

Standards

The Standards were initially adopted in June 1975 and revised in 1981, 1988, 1993, 2005, and 2011. ICA, formerly known as the Commission on Accreditation of Ophthalmic Medical Programs (CoA-OMP), merged US ophthalmic training programs with Canadian ophthalmic training programs in 2016. The ICA has developed these new International Standards.

These Standards are to be used for the development, evaluation, and self-analysis of allied ophthalmic training programs.

The Standards are the minimum requirements of quality used in assessing programs that prepare individuals to become AOP. The extent to which a program complies with these Standards determines its accreditation status. The Standards constitute the minimum requirements to which an accredited program is held accountable, and are printed in regular typeface. Programs are only required to meet the Standards.

Guidance and Required Evidence

The Guidance and Required Evidence accompanying the Standards provide explanations intended to assist in interpreting the Standards and to provide recommendations on how to meet and/or exceed the Standards.

Objective

Standards are currently sponsored by the following organizations, each of which is represented on the International Council of Accreditation (ICA):

- Association of Technical Personnel in Ophthalmology (ATPO)
- International Joint Commission on Allied Health Personnel in Ophthalmology (IJCAHPO)
- Consortium of Ophthalmic Training Programs (COTP)
- Canadian Society of Ophthalmic Medical Personnel (CSOMP)

The sponsoring organizations cooperate to establish, maintain, and promote appropriate Standards of quality for educational programs for AOP, and to provide recognition for educational programs that meet or exceed the requirements outlined in the Standards.

The ICA Board of Directors, assisted by report reviewers and on-site review teams, evaluate a program's compliance with the Standards and Guidelines. Educational programs that meet or exceed the minimum

requirements stated in the Standards are granted an accreditation status in four different levels, providing public recognition of such achievement.

The four ophthalmic training program levels:

1. Ophthalmic Non-Clinical Assistant Program (Entry Level) *
2. Ophthalmic Clinical Assistant Program (Entry Level)
3. Ophthalmic Technician Program (Intermediate Level)
4. Ophthalmic Medical Technologist Program (Advanced Level)

A list of accredited programs is published for the information of students, employers, educational institutions and agencies, and the public, on www.icaccreditation.org.

*The Non-Clinical Assistant Program is the only level of training program that is accepted in a secondary academic institution.

Description of the Profession
The ophthalmic medical technician profession encompasses all levels of training and all levels of IJCAHPO certification. The ophthalmic medical technician is the Standard Occupational Classification (SOC) listing for the profession.

Ophthalmic medical technicians are skilled professionals, qualified by didactic and clinical ophthalmic training, who perform ophthalmic procedures under the direction or supervision of a licensed ophthalmologist who is responsible for the performance of the ophthalmic medical technician. Ophthalmic medical technicians render supportive services to the ophthalmologist. They are employed primarily by ophthalmologists, but may be employed by hospitals, clinics, or physician groups and are assigned to an ophthalmologist. The ophthalmic medical technician cannot replace the ophthalmologist in the decision-making process necessary to establish a diagnosis and a plan of treatment, but assist the physician by collecting data necessary to reach those decisions and by transmitting and executing the ophthalmologist's instructions.

The functions of the ophthalmic medical technician are to assist the ophthalmologist by performing delegable tasks. These tasks may include, collecting data, administering treatment, assisting in ophthalmic surgical procedures, and supervising patients as deemed appropriate according to training level and may be delegated by a supervising ophthalmologist as applicable by law.

The Accreditation Process

Accreditation is an ongoing process. Programs enter the process, and once they gain accreditation, must continue to maintain continuous self-study and improvement mechanisms. Accreditation ensures a quality education. In the medical fields, accreditation not only serves the students, but also the patients they will encounter later.

Confidentiality in the Accreditation Process
Meticulous efforts are made by all components of the review process to maintain confidentiality of information collected during the entire accreditation review, as well as the avoidance of conflict of interest. ICA holds as confidential the following documents and the information contained therein:

- Application for Accreditation
- Self-Study Report
- Site Visit Report
- Progress Report
- All correspondence related to the accreditation process between ICA and the programs

These materials are to be read and discussed only by members of the Site Visit Team, ICA, and other authorized persons. At all stages of accreditation until ICA announces its decision, all persons connected with the process should keep strictly confidential the names of all applicant programs and all pending action. The Site Visit Team returns all program materials to ICA immediately following the site visit.

Applying for Accreditation - New Programs
New programs applying for accreditation must be well established and have students in clinical rotations (ophthalmic non-clinical assistant programs must have students in classes).

Submission Requirements for Self-Study Report
All programs must meet the Standards and Criteria to obtain initial or continued accreditation from ICA. Self-Study reports must include narrative responses to each criteria and supporting evidence. The required evidence identified in each criteria should be treated as the minimum evidence a program must submit. Additional evidence beyond the minimum requirements is expected and encouraged.

Initial Approval - New Programs
Initial approval may be granted to new programs that have not yet completed the accreditation process before the first class of students graduate. Initial approval will grant the first graduating class eligibility to apply to take the IJCAHPO certification exams. The two items that must be submitted to ICA for initial approval to be considered:

1. A detailed letter outlining the ophthalmic training program.
2. The initial application fee.

Administrative Requirements for Maintaining Accreditation
Accredited programs are required to comply with administrative requirements for maintaining accreditation, which include:

1. Submitting the Self-Study report one year before the end of the period for which accreditation was awarded
2. Agreeing to a reasonable Site Visit date before the end of the period for which accreditation was awarded (if applicable)
3. Paying annual dues and accreditation fees to ICA within a reasonable period of time as determined by ICA
4. Providing an Annual Report and Annual Fee on or before October 31

Annual Reports and Annual Fees

1. If a program submits an Annual Report and/or Annual Fee one (1) month late, that program will be assessed a $50 late fee and will be placed on Administrative Probation.
2. If a program submits an Annual Report and/or Annual Fee two (2) months late, that program will be assessed a $100 late fee, will be placed on Administrative Probation, and accreditation may be withdrawn.
3. Programs are not required to submit an annual report the same year a Self-Study is submitted.

Substantive Change
The sponsor must report substantive change(s) to ICA in a timely manner. Substantive changes include, but are not limited to the following:

1. Changes in the positions of the program director or medical director
    a. If either position remains vacant for 30 days, the program must send ICA a description of the actions taken to maintain the continuity and effectiveness of the program.
2. Change in accreditation status of the sponsor
3. Change in institution's mission or objectives if these will affect the program
4. Change in sponsorship
5. Addition of courses that represent a significant departure in content or in method of delivery
6. Change in degree or credential level
7. Substantial increase or decrease in clock or credit hours for successful completion of the program or in the length of the program.

Administering the Accreditation Process
The accreditation review process includes a Site Visit (excluding the Ophthalmic Non-Clinical Assistant Program). If the performance of a Site Visit Team is unacceptable, the institution may request a second Site Visit.

The program under review is given an opportunity to review the findings and conclusions of the Board's decision and to comment on the accuracy or provide additional evidence to support a change.

Administrative Probation
If a program fails to meet the administrative requirements for maintaining accreditation, it may be placed on Administrative Probation and accreditation may be withdrawn.

Probationary Accreditation
Prior to assigning Probationary Accreditation, ICA provides the sponsoring institution with an opportunity to respond and correct the cited deficiencies. ICA assignments of Probationary Accreditation are final and not eligible for further appeal. The maximum period for probation is up to two years. If cited deficiencies are not corrected within two years, accreditation is withdrawn.

Withholding or Withdrawing Accreditation
Prior to withholding or withdrawing accreditation, ICA provides the sponsoring institution with an opportunity to request reconsideration. ICA decisions to withhold or withdraw accreditation are final. A copy of the ICA Appeals Procedures for Accreditation Withheld or Withdrawn is included with the letter notifying the program of one of these actions. When accreditation is withdrawn, the sponsoring institution is provided with a clear statement of each deficiency.

Withdrawn or Withheld programs may begin the new accreditation process with a new Self-Study.

Inactive Programs
The sponsoring institution may request inactive status for a program that does not enroll students for a maximum of two-years. Inactive programs must pay annual fees to ICA. After being inactive for two years, the program will be considered discontinued and accreditation will be withdrawn.

The Accreditation Review Process

The basic accreditation review process for both initial and continuing accreditation is presented in distinct steps for purpose of illustration.

Step	Description	Additional Information
1	The institution completes a Self-Study of its allied ophthalmic training program. The Self-Study template can be found at http://icaccreditation.org/pdf/self_study_template.pdf.	
2	The completed Self-Study, Summary of Program Compliance, and fee are submitted to the ICA office.	
3	Within four weeks of receipt of Self-Study, staff will verify that all items requested are included within the Self-Study.	
4	If the Self-Study is insufficient it may be returned to the program without a Board Member's review. If the Self-Study is partially acceptable but incomplete, staff will notify the program in writing specifying items and information missing and a deadline for submission.	
5	If/When the Self-Study is complete; it is forwarded to an ICA Board Member Reviewer to determine the readiness of the program to be site-visited.	
6	If the Board Reviewer finds the Self-Study to be incomplete and/or insufficient, he or she will direct staff to notify the program, in writing, specifying the items and information lacking and including a deadline for submission. If the program fails to respond to this request or the Self-Study is still incomplete and/or insufficient after the program's response, the Self-Study will be returned to the program without review or recommendation to the Board and the application will no longer be considered active.	
7	If the Self-Study is found to be sufficient the Board Reviewer will recommend a Site Visit or formal evaluation to take place (Ophthalmic Clinical, Technician, or Medical Technologist Programs).	Prior to the scheduling of an on-site evaluation, the program must be advanced enough to have students assigned and attending clinical rotations.
8	The Ophthalmic Non-Clinical Assistant Program does not require a Site Visit. A Virtual Review will be completed by two Board Reviewers, and will send their report to the ICA office. (Skip to Step 11)	
9	Staff schedules a Site Visit.	
10	A Site Visit is completed by the on-site team.	
11	A verbal summative report of findings may be presented to the program at the end of the Site Visit.	
12	The Site Visit chair forwards the Findings Report to ICA staff.	
13	Staff adds the program and recommendation to the next Board meeting agenda.	
14	The full ICA Board of Directors discusses and votes on the program at the next ICA Board Meeting.	Please note, the ICA Board of Directors meets twice per year to consider accreditation recommendations.
15	Program receives notification of accreditation action.	If the accreditation action is negative (denied, withheld, or tabled) the program is given the opportunity to request reconsideration.
16	Program responds to notification of accreditation action.	
17	Board Member reviews program's response. If further action is necessary, it will go to the full ICA Board of Directors.	

Notes:

- It is not uncommon for this process to take up to or longer than six to eight months after all required and appropriately completed documents are received.
- The Board of Directors can opt to table a program instead of recommending a negative action, and request more information.
- Accreditation is awarded for two or six years.

Accreditation Application Fees

Type of Fee	Fee
First Application (all programs)	$1,500.00
Renewal Application (all programs)	$1,000.00
Site Visit Costs	Actual Cost
Late Payment Fee (1 Month)	$50.00
Late Payment Fee (2 Months)	$100.00

Annual Fees

Due on or before October 31

Number of Programs	Annual Fee
1 Program	$575.00
2 Programs	$725.00
3 Programs	$875.00

The Standards of accreditation included herein apply to the following definitions/designations of AOP:

Ophthalmic assistant
The ophthalmic assistant is an entry-level AOP that works under the direction of an ophthalmologist. The ophthalmic assistant performs ophthalmic testing, administers ophthalmic medications, and collects data for interpretation by the ophthalmologist. The ophthalmic assistant has the basic knowledge and skills to perform fundamental ophthalmic tasks.

Ophthalmic technician
The ophthalmic technician is a mid-level AOP that works under the direction of an ophthalmologist. The ophthalmic technician performs ophthalmic testing, administers ophthalmic medications, and collects data for interpretation by the ophthalmologist. The ophthalmic technician has a broad range of ophthalmic knowledge and mastery of core skills.

Ophthalmic medical technologist
The ophthalmic medical technologist is an advanced level AOP that works under the direction of an ophthalmologist. The ophthalmic medical technologist performs ophthalmic testing, administers ophthalmic medications, and collects data for interpretation by the ophthalmologist. The ophthalmic medical technologist has mastery of core and advanced skills and an expanded depth of knowledge to support the skill set.

Refractionist
The refractionist is an AOP with advanced skills and knowledge in optics and refractive errors. The refractionist's skills are in the practical application of the laws of refraction and the determination of the corrective lenses that best correct a patient's vision.

Ophthalmic surgical assistant
The ophthalmic surgical assistant is an AOP with knowledge of the procedures and instrumentation required for assisting in ophthalmic surgical and laser procedures.

Contact lens fitter
The contact lens fitter is an AOP with in-depth knowledge of optics and refractive errors with an expertise in contact lens fitting and contact lens related issues.

Retina technician
The retina technician is an AOP with expertise in evaluation and diagnostic testing specific to a retina specialist's practice.

Ophthalmic imaging specialist
The imaging specialist is an AOP with an expertise in ophthalmic imaging ranging from digital photography to angiography and laser scanning imaging.

Diagnostic ophthalmic sonographer
The diagnostic ophthalmic sonographer is an AOP who has a knowledge base in the principles and instrumentation of ophthalmic ultrasound and high frequency ultrasound. Examination techniques include B-Scan, A-Scan, and ultrasound biomicroscopy.

Ophthalmic ultrasound biometrist
The ultrasound biometrist is an AOP who performs A-Scan biometry for the purpose of IOL calculations and has a knowledge base in biometry and ultrasound physics.

Ophthalmic scribe
The ophthalmic scribe is an AOP specifically trained in entering data and maintaining patient medical records under the supervision of an ophthalmologist. These records include the documentation of a comprehensive patient history, physical examination, medications, lab results, diagnosis and treatment plan, and other essential patient information.

Standard 1 – Admission Requirements and Fair Practices

1.1 Admission requirements clearly delineate the minimum criteria for entrance to the program and admission practices align with published information and are consistently applied to all applicants.

Critical Criterion

Guidance:
Admission requirements must be made in accordance with clearly defined and published practices of the institution. Any specific academic and technical standards required for admission to the program must also be clearly defined, published, and readily accessible to prospective students and the public. Procedures for assessing and applying advanced placement, transfer of credit, and credit for experiential learning must be published and accessible to prospective students.

Admission criteria must include educational requirements leading to eligibility for certification at the level of the program.

The program must follow national guidelines for acceptance of students. This may include ability to benefit (ATB), preadmission tests or evaluations or prior learning assessment.

Required evidence:
Complete admission policies, procedures and criteria that are applied to prospective students to determine their eligibility for entrance to the program, including ATB students, as applicable.

1.2 The program does not deny admission nor discriminate against applicants, enrolled students, or program personnel.

Guidance:
The program must publish and consistently follow a policy that ensures applicants, students, and program personnel are treated equally. The program must reasonably accommodate applicants and students with disabilities.

Required evidence:
Policies and procedures related to non-discrimination of applicants, students, and program personnel.

1.3 Prior to enrollment, the program informs applicants of any potential barriers that could prevent them from successfully completing the program.
Guidance: The program must establish a procedure for determining that the applicants' or students' health will permit them to meet the didactic and clinical performance requirements of the program. If students must complete any mandatory clinical requirements prior to placement (e.g. immunizations, Tuberculosis test, background check, CPR/first aid, etc.), these requirements must be made known to applicants before enrollment. Applicable technical standards must be disclosed prior to admission. ***Required evidence:*** *The program must provide policies, procedures, and/or documentation that are made available to applicants relative to any additional program requirements which might impede their ability to successfully complete the program.*

1.4 All published advertising materials present clear and accurate information regarding the program.
Guidance: Published information contained in academic catalogs, advertising materials, brochures, webpages, etc. must represent a true and accurate description of the level of the program. There must be no ambiguous or misleading information with regard to curriculum, policies and procedures, facilities, equipment, learning environment, graduate employment rate, eligibility to apply for certification examinations, or expected income expectations for graduates. At minimum, the following must be published and accessible to applicants: • name, address, telephone number of accrediting agency and any corresponding status of accreditation • admissions policies and procedures • policies on advanced placement, transfer of credits and credits for experiential learning At a minimum, students must be provided with the following written information: • academic calendar • student grievance procedure • criteria for successful completion of each course/segment of the program and for program graduation, including the required number of clock hours or credit hours • requirements for laboratory and supervised clinical practice, including a list of all required competencies • policies and procedures for withdrawal and for refunds of tuition/fees ***Required evidence:*** *All current advertising and promotional materials used by the program must be provided.*

1.5 The cost of tuition and all associated program charges are published and accessible or provided to prospective students prior to enrollment.

Critical Criterion

Guidance:
The program must publish the cost of tuition. In addition to tuition charges, the program must also publish an itemized list of all associated program fees (e.g. textbooks, laboratory fees, uniforms, supplies, miscellaneous fees, etc.). The program should also identify for applicants and students, the cost of out-of-pocket fees, such as immunizations, background checks, certification examinations, etc.). Approximate ranges can be provided for these items if costs vary.

If the program or some courses are delivered via distance education, the program must identify any additional costs associated with this delivery method.

Required evidence:
The program must provide a list of all program fees and indicate how these fees are provided to prospective students.

Standard 2 – Program Curriculum

2.1 The program establishes clearly written and published objectives that are consistent with the needs and expectations of stakeholders served by the program.

Guidance:
Program objectives must, at a minimum, include requirements for successful completion of the program and competently prepare graduates for entry-level employment consistent with the level of the program.

Required evidence:
Excerpt of program objectives for student handbook, webpage, or other documentation that is published and readily accessible to students.

2.2 Applicants and students are provided with a clearly written description of the program.

Guidance:
The program description must provide a written synopsis of the program content, learning objectives, supervised clinical practice, and the competencies required for graduation.

Required evidence:
A copy of the program description that is made available to applicants and students must be provided.

2.3 Common Didactic Curriculum for the relevant AOP program must be followed.

Critical Criterion

Guidance:

The program curriculum must include content that enables students to attain the knowledge and skills necessary to assist the ophthalmologist in the provision of care to eye patients by performing all assigned duties and tasks consistent with their level of training.

The standard curricula for all AOP programs are based on the job task analysis of the profession endorsed by IJCAHPO and thorough review from other qualified eye care professionals. Curriculum and certification standards are developed by the International Joint Commission on Allied Health Personnel in Ophthalmology/Joint Commission on Allied Health Personnel in Ophthalmology. See Appendix A.

The curriculum must ensure the achievement of program goals and learning objectives. Instruction must be an appropriate sequence of classroom, distance education, laboratory, and clinical activities. Instruction must be based on clearly-written course syllabi describing learning goals, course objectives, and competencies required for graduation.

Actual program length may vary, depending on institutional policy or government laws or regulations. Program length includes didactic, laboratory, and clinical experiences. The minimum didactic hours are listed in the curriculum. Course sequencing should be such that it promotes a logical progression of learning.

A competency is an area of curriculum that tests for the appropriate practical skills and knowledge to complete a predefined set of professional tasks and abilities.

The core outcomes for AOP programs are listed below:

1. **Patient Care** that is compassionate, appropriate and effective for the treatment of ophthalmic health problems and the promotion of health
2. **Medical Knowledge** about ophthalmic and systemic disease and cognate sciences and the application of this knowledge to patient care
3. **Interpersonal and communication skills** that result in effective information exchange and teaming with patients, their families and other health professionals
4. **Professionalism,** as manifested through a commitment to carrying out professional responsibilities, adherence to ethical principles, and sensitivity to a diverse patient population
5. **Community and health services** that demonstrate an awareness of and responsiveness to the larger context and system of health care and the ability to effectively call on system resources to provide care that is of optimal value
6. **Technical and scientific skills** adequate to administer treatment, perform tasks, and collect data as ordered by an ophthalmologist

Programs may include a combination of didactic and distance learning. The supervised clinical experience is required for all program levels except the non-clinical assistant level.

Pertinent scientific principles and concepts must be identified, incorporated into the curriculum, and included in supervised clinical instruction of the program.

Required evidence:
A matrix (cross-reference) document that identifies where each of the performance objectives is covered in the program's curriculum. See example in Appendix B.

2.4 The program progresses in a logical sequence to enable student learning.

Guidance:
The curriculum must be designed in a manner that provides students with opportunities to apply knowledge and to practice skills through correlated and supervised instruction in clinical practice areas. Application of clinical practice must build upon evidence based concepts and knowledge to enable students to attain the competencies required for program graduation.

Required evidence:
A program map that identifies all information pertinent to the program's sequence and delivery:

- *total length of program*
- *clock and/or credit hours awarded for each course*
- *course prerequisites and/or co-requisites*
- *sequence of the courses/segments delivered to students*
- *options available for the student: full-time/part-time*
- *maximum time frame for program completion*

2.5 The program is delivered using a variety of instructional methods to ensure students are actively engaged in their education and to facilitate achievement of learning objectives.

Guidance:
Instructional methods may include, but are not limited to, textbooks, lectures, demonstrations, webinars, online courses, and videos. Activities such as field assignments, case studies, etc. should be incorporated into the curriculum to enhance the application of previous and ongoing learning.

<u>Site-based delivery:</u>
Didactic instruction may be delivered through lecture and student – instructor interaction.

<u>Laboratory and clinical delivery:</u>
A meaningful supervised laboratory and clinical experience that closely relates to the didactic content presented in the didactic and laboratory components must be included in the program. While performing ophthalmic procedures during clinical rotations, students must be supervised

by another certified ophthalmic technician or appropriately qualified AOP or a licensed ophthalmologist or another licensed ophthalmic professional working within their scope of practice must be present.

Online delivery:
Delivery of programs or courses offered via distance education must be conducive to student learning and enable students to meet the required learning objectives. Instruction offered through distance learning format must afford students the same learning opportunities as instruction offered in a traditional face-to-face format.

Appropriate systems and processes must be implemented to provide properly protected and secured internet and online security technology for the faculty and student use, and sequential learning with passwords and online restrictions. All examinations, discussions, and course work that are completed and submitted online must take place through a protected and secured login portal. Programs must have a learning management system in place that includes the ability to ensure that the student taking examinations, participating in discussions, and completing and submitting course work is the enrolled student.

Required evidence:
The program must provide a list of instructional methods that are utilized to deliver the program, along with a description of the educational assignments and activities students are required to complete during the program.

2.6 Clearly written and comprehensive syllabi are provided to all students at the beginning of the program or prior to each course.

Critical Criterion

Guidance:
At a minimum, course/segment syllabi must include the following elements:

- Course/segment title
- Course/segment description
- Course/segment learning objectives
- Textbooks and other instructional resources used for course/segment delivery
- Required pre- and/or co-requisites
- Competencies students must attain (didactic and/or supervised clinical practice)
- Methods of evaluation and weight applied to each (exams, quizzes, assignments, etc.)
- Requirements for successful completion of the course/segment

Required evidence:
Copies of syllabus for each course of the program that include the required elements.

2.7 Supervised clinical experience must meet minimum clinical hours and documentation of achievement of competencies.

Critical Criterion

Guidance:

Minimum supervised clinical hours:

- Ophthalmic assistant: 400 hours
- Ophthalmic technician: 750 hours
- Ophthalmic Medical Technologist: 1500 hours

Required Evidence:
The program must provide documentation of clinical hours.
The program must provide documentation of competency attainment.

Standard 3 – Student Assessment

3.1 The program's policies, procedures and forms used to assess student performance are clearly written, published and consistently applied to all students.

Critical Criterion

Guidance:
Policies and procedures must be in place to guide and inform the student of the assessment and evaluation process. Forms and tools used to assess students must include all required competencies and enable the evaluators to validate student attainment of these competencies. The forms and tools must be directly related to the learning objectives identified in the program's curriculum. Assessment criteria must be well defined, objective and promote consistency and accuracy of student grading. All required criteria that must be met to pass an assessment must be identified in the assessment forms and tools.

Required evidence:
The program must describe the processes used to assess students in didactic, laboratory and clinical courses. The program must provide all policies and procedures related to student assessment. All forms and tools used to assess student attainment of competencies must also be provided.

3.2 Assessment of students is conducted on a recurrent basis and with sufficient frequency to provide both the students and program personnel with valid and timely indications of the students' progress toward and achievement of the competencies and learning objectives stated in the curriculum.

Critical Criterion

Guidance:
Documented assessment of all students must be conducted on a frequent basis to provide both the students and program personnel with the students' progress toward and achievement of the competencies and learning objectives stated in the curriculum. Student assessment must be directly related to the objectives and competencies described in the curriculum for both didactic and supervised clinical education components.

Assessments of both a formative and summative nature must be utilized by the program. Formative assessments must monitor student learning and progression toward competence by identifying strengths and/or areas for improvement and providing constructive feedback to the students. Summative assessments must measure the students' comprehension of didactic knowledge and their proficiency in attaining required clinical competencies. The program should strive to ensure clinical opportunities and experiences are equitable for all students. Criteria for student clinical site selection and assignments must be consistently applied.

Required evidence:
Student records from the most recent graduate cohort and previous cohort that include both formative and summative assessments and demonstrate attainment of the required competencies. Examples of assessments include: test scores, rubrics, log books, etc. Criteria for student clinical site selection and assignment. Tabular data from the past five years need to be available.

Standard 4 – Program Personnel Qualifications, Training, and Professional Development

4.1 The medical director is educationally and experientially qualified and trained to ensure educational objectives are met and to fulfill the assigned role in the program.

Critical Criterion

Guidance:
The medical director must be an ophthalmologist, who meets the legal requirements to practice in the jurisdiction in which the program is based. The medical director may also serve as the program director.

Required evidence:
Documentation including current license or relevant government documentation and curriculum vitae.

4.2 The program director is educationally and experientially qualified and trained to ensure educational objectives are met and to fulfill the assigned role in the program.

Critical Criterion

Guidance:
The program director must:

- Hold IJCAHPO certification at the same level or higher to that of the program being delivered.
- Strive to achieve a certificate/degree or training in adult education and instructional theory.
- Demonstrate competency in cognitive (knowledge), psychomotor (skills), and affective (behavior) learning domains.

If the program is delivered in whole or in part via distance education, the program director must have completed training in online coursework, including moderating, facilitating as well as developing courses for online use.

Required evidence:
Documentation such as a curriculum vitae and/or other relevant evidence must be provided for the program director.

4.3 Instructional staff is educationally and experientially qualified and trained to ensure educational objectives are met and to fulfill the assigned role in the program.

Guidance:

Instructors of discipline-specific courses:

Instructors of discipline-specific or core courses must hold proper credentials, such as IJCAHPO certification at or above the level of the program. Instructional staff members must have competency in the cognitive (knowledge), psychomotor (skills), and affective (behavior) learning domains, for the subject matter taught. Non-physician instructors may teach the psychomotor and affective domains.

Instructors of Medical Diagnosis/Treatment:

Program content related to systemic diseases, eye diseases, and surgical procedures must be overseen or supervised by a medical doctor (MD) or doctor of osteopathy (DO). A course which involves medical diagnosis, medical treatment, or surgery should be taught by an MD or DO and they may have a non-physician as a co-instructor. An MD or a DO must play a major role in the development and delivery of the course and may have a non-physician as a co-instructor.

Instructors of Pharmacology:

Pharmacology courses must be taught by a registered pharmacist, PhD pharmacologist, MD, or DO. Incidental references to pharmacological agents do not violate this rule. If a course is presented on any of these subjects with a non-pharmacist, non-PhD pharmacologist, non-MD or non-DO as a co-instructor, it is required that a pharmacist, PhD pharmacologist, MD, or DO play a major role in the development of the course.

Instructors for distance education programs/courses:

Instructional staff members charged with delivery of distance education programs or courses must strive to complete training related to the online teaching methodologies, including moderating online classes, facilitating student-instructor communication, use of learning management systems, and developing coursework for delivery in an online environment.

At a minimum, distance education programs must require instructional staff members to conduct weekly online discussions to ensure students have the opportunity to ask general questions and communicate directly with program/course instructors. Oversight and supervision of distance education programs and courses must be conducted by a member of the instructional staff or a program director trained in distance education teaching methodology.

Required evidence:

Documentation such as a curriculum vitae and certification must be provided for each member of the instructional staff.

4.4 The program must support the instructional staff by providing time, resources and opportunities to pursue and complete field-related professional development activities and to enhance pedagogical skills.

Guidance:
Programs must demonstrate that instructional staff members are encouraged in their continual pursuit of professional development to enhance field-related knowledge and skills and improvement of their competence in teaching methodology. The institution is encouraged to provide a faculty development program in the principles of adult education.

Professional development for distance education instructors:
The program must provide continual technical development and support for online instructors. The institution must have a faculty development program in the principles of adult education for course delivery in an online environment.

Required evidence:
Programs must provide a written policy that describes the support provided to instructional staff relative to opportunities for completion of professional development activities for maintaining and upgrading their professional and instructional abilities.

4.5 The program has adequate clerical support.

Guidance:
Adequate administrative and support staff must be available to support program faculty.

Required evidence:
The program must provide job descriptions for administrative and support staff available to the program.

4.6 Responsibilities assigned to the medical director are conducted in a manner that achieves program objectives and expected outcomes.

Guidance:
The medical director must approve courses and properly credentialed instructors covering: systemic diseases, eye diseases, pharmacology, and surgical procedures. The medical director of the program must provide competent direction or guidance and instruction (as appropriate) to ensure that the medical components of the curriculum, both didactic and supervised clinical practice, offer correct, timely information, and meet professional standards of patient care.

Required evidence:
A job or role description identifying all duties assigned must be provided to the medical director.

4.7 Responsibilities assigned to the program director are conducted in a manner that achieves program objectives and expected outcomes.

Guidance:

The program director must have time to fulfill assigned administrative and/or instructional responsibilities. Administrative duties may include program management and record keeping; curriculum development and evaluation, student selection and counseling; participation in the budgetary process; participation in the development of printed materials related to the program; and clinical coordination.

The program director must be responsible for the effectiveness of the program. Sufficient non-teaching time must be allowed for program organization, administration, continuous review, planning and development. The program director must:

- Coordinate all aspects of the program, including the organization, administration, continuous review, planning, development, and achievement of program's goals and outcomes.
- Establish criteria for sites that provide clinical education experiences for students.
- Evaluate on an annual and planned basis all clinical education sites where students are gaining clinical experience.
- Provide clinical instructors with orientation/training on assessment policies, procedures, and forms.
- Ensure regularly-planned communication between the program and the clinical instructor.
- Ensure all clinical education experiences of students occur under the supervision of a qualified AOP.

Administrative and coordination responsibilities of the program director should be recognized as a department assignment. The amount of time devoted to these responsibilities should be consistent with departmental or institutional policy, but should be deemed appropriate in view of the administrative responsibilities of the program director. A role may be developed for an assistant to aid with these duties as delegated by the program director.

For programs and courses delivered via distance education, the program director must be responsible for coordinating and providing faculty with training and education, ensuring the adequacy of distance education instructional design, technologies, and assuring student-instructor interaction and communication is occurring on a continual basis.

Required evidence:

A job or role description identifying all duties assigned must be provided to the program director.

4.8 Student supervision and assessment is conducted by qualified program instructional staff and clinical personnel.

Critical Criterion

Guidance:
In each location where a student is assigned for didactic or supervised practical instruction, there must be a qualified individual designated to provide supervision and related frequent assessments of the student's progress in achieving acceptable program requirements.

Students must perform direct patient care under the direction or supervision of a licensed ophthalmologist. Ophthalmic personnel working within their scope of practice may be responsible on a daily basis for the AOP student's performance, teaching, and training, and should be certified or licensed at the same or higher level as the student's training. An ophthalmologist should be on the premises during all clinical rotations.

Clinical Instructors must:

- Consistently supervise students during clinical experiences and have the ability to intervene on behalf of the student or patient to provide on-going and consistent education.
- Interact consistently and physically with the student at the site of the clinical experience.
- Participate in regularly-planned communication between the program and the clinical instructor.
- Provide instruction and clinical experience in relevant practice competencies delineated in Appendix A.

Programs may utilize optometrists that are in an MD practice for these learning areas: optics, spectacles, refraction, and contact lenses.

Required evidence:
Job or role descriptions identifying all duties assigned to instructional staff members and clinical personnel.

4.9 Instructional staff members fulfill their student teaching and non-teaching responsibilities.

Guidance:
Instructional staff members must be provided with time to complete assigned duties. Teaching loads for instructors must be reasonable and appropriate to enable them to prepare for class, to grade examinations and assignments, and to deliver the coursework.

Required evidence:
A job or role description identifying all duties assigned to instructional staff. Course evaluations and student evaluation of clinical experience.

4.10 The number of qualified instructional staff members is sufficient to ensure effective oversight, instruction, supervision, and evaluation of students.

Guidance:
The program must maintain a sufficient number of instructional staff members to provide students with adequate attention, instruction, and supervised practice to acquire the knowledge and competencies needed for entry to the profession. The program must establish policies or practices related to supervision of students in the didactic, laboratory, and clinical environments.

Required evidence:
The program must provide the instructor-to-student ratio for the didactic, laboratory and clinical environments and explain how these ratios support student education.

Standard 5 – Program Resources

5.1 The program demonstrates that it has the necessary financial resources to fulfill its obligations to students and ensure continuity of operations.

Critical Criterion

Guidance:
Evidence must be submitted that current financial resources and allocation meet the program's commitment to its students and for continued operation of the educational program. Annual documentation of the program's financial resources must be maintained, including complete records of the program's budget allocations and expenditures.

Required evidence:
The program must provide sufficient evidence to enable assessment of its financial stability and soundness of its financial management.

5.2 Program facilities, including classrooms and offices are appropriate to support faculty and students and promote a positive educational environment.

Guidance:
Sufficient and suitable classrooms, laboratories, clinical and other facilities are available to accommodate students. Offices or workspace is provided for administrative and instructional staff.

Required evidence:
The program must provide a list or floor plan identifying all its didactic and laboratory classrooms, administrative offices, storage space, and other pertinent program-specific facilities.

5.3 Appropriate and sufficient equipment, instructional aids, and supplies are available for student use and for teaching the didactic and supervised clinical practice components of the program. **Critical Criterion**
Guidance: Computer hardware and software, audiovisual resources, models, reference materials, and clinical equipment must be provided as required by the types of student learning experiences. Technology adequate to support courses and equipment for delivery of online courses is required for programs or courses delivered via distance education. ***Required evidence:*** *The program must provide lists of all equipment and primary renewable supplies. Policies and procedures for maintenance of laboratory equipment and service schedules or logs must be provided. If the program utilizes outside facilities and equipment for didactic instruction or laboratory practice, a full description of these facilities and the equipment housed within them is required.*

5.4 The program maintains appropriate library and learning resource materials that are sufficient in quantity and scope to support the educational objectives of the program.
Guidance: Students must have ready access to a sufficient supply of current books, journals, periodicals, electronic media, and other reference materials related to the program's curriculum. If the program utilizes an online resource center, students must be properly trained to access and use the educational materials. For programs offered via distance education, students must have online access to an appropriate supply of program-related educational materials, electronic media, and other reference materials. ***Required evidence:*** *A list of primary resource materials and corresponding publication dates that made are available to students of the program must be provided.*

Standard 6 – Records Maintenance and Privacy

6.1 Academic transcripts are maintained by the institution or program indefinitely and other educational records are kept in accordance with the program's published policies.

Critical Criterion

Guidance:
All student records must be kept in an accessible location and securely maintained against loss or damage. Student admission, attendance, assessment, financial and other pertinent records must be maintained in physical or electronic format. Student evaluation records must be maintained in sufficient detail to document learning progress and achievements. Grades and credits for courses must be recorded on the student transcript and permanently maintained by the institution or program.

Required evidence:
The program must provide its policies and procedures relative to student records maintenance.

6.2 The program's policies, procedures and practices on access to student educational and personal records ensure that student confidentiality and privacy is maintained at all times.

Guidance:
The program must have policies describing its process for ensuring that student confidentiality and privacy is maintained. Personal, academic, financial or other student information must only be shared within the legal guidelines applicable in the program's location. Releases of any private student information must follow applicable legal guidelines. Student evaluation records that are maintained at a site during a student's clinical placement must be returned to the program at the conclusion of the clinical rotation.

Required evidence:
Policies and procedures regarding privacy of student information must be provided by the program. The program's policies and procedures must describe who is permitted access to student records and under what circumstances. If a consent form is used by the program, a copy of the form must be provided.

6.3 The program has policies and procedures related to periodic review and renewal of affiliation agreements to determine each site's viability as a clinical partner.

Guidance:
In programs in which academic and clinical didactic and supervised practice are provided by two or more institutions, responsibilities for program administration, instruction, supervision, and other functions of the sponsoring institution and each affiliate must be clearly documented as a formal affiliation agreement or memorandum of understanding.

There must be a formal affiliation agreement or memorandum of understanding between the sponsoring institution and all other entities that participate in the education of the students describing the relationship, role, and responsibilities between the sponsor and that entity. The agreements must include a statement that students will be supervised by qualified personnel. The time period covered under the agreement must be identified and the agreements must be signed and dated by both parties. All affiliation agreements must identify that appropriate insurance and liability protection has been secured for students, and the parties responsible for the coverage.

The program must identify and consistently apply criteria for determining the appropriateness of new clinical sites.

Required evidence:
All current, valid and signed affiliation agreements must be provided. Criteria used to determine whether a new site is appropriate and sufficient for student clinical placements.

6.4 The program has defined and published policies and procedures for processing faculty and student grievances and student academic appeals.

Critical Criterion

Guidance:
Policies and procedures for addressing and processing faculty and student grievances and student appeals of grades must be published. The policies and procedures must specify the steps to follow for submitting an academic or non-academic grievance or appeal and the timelines in which the program will act on the grievance or appeal. There must be a mechanism and provisions in the policy and procedures that afford the petitioner the right to due process and an impartial resolution.

Required evidence:
The program must provide its policies and procedures related to managing faculty and student grievances and student academic appeals.

6.5 Policies and procedures for student withdrawal and for refunds of tuition and fees are published and made known to all students.

Guidance:
The program's policy must clearly state the procedures a student must follow to officially withdraw from the program. Refunds of tuition and fees must be fair and equitable to the student and the practice of issuing refunds must align with the program's published policy. The timeline for issuing a refund of tuition following a student withdrawal must be identified in the policy.

Required evidence:
The program must provide its policies and procedures on student withdrawal from the program and issuing applicable refunds of tuition and fees.

6.6 The program publishes and equitably applies policies and procedures related to student remuneration at clinical sites.

Guidance:
Policies and procedures under which students participate in program assigned supervised clinical activities while enrolled in the program must be published and made known to all concerned. After demonstrating proficiency, students may be allowed to undertake certain defined activities with appropriate supervision and direction.

The policies and procedures related to students performing assigned supervised clinical activities must address whether remuneration of students (i.e. receiving monetary compensation from clinical sites) is permitted. Policies must be fair and equitable to students, applied consistently to all students, and must not cause a perceived or real conflict of interest or take advantage of, or abuse, the student. Student remuneration must not adversely impact their education.

Required evidence:
The program must provide its policies and procedures regarding students performing assigned supervised clinical activities while enrolled in the program.

6.7 The program has policies concerning student health and safety and exposure to safe working practices.

Critical Criterion

Guidance:
Policies and procedures must be in place and explained to students. The policies and procedures may include student health and immunizations, procedures for exposure and injury, universal precautions, electrical safety, ergonomics and safe working practices.

Required evidence:
All program-related safety policies must be provided.

6.8 The program provides students with timely access to academic and non-academic support services.

Guidance:
The program informs students about the variety of academic and non-academic services and support available for successful completion of the program.

Services may include academic advising, academic support services, counseling, career counseling, health services, financial aid, and disability services.

Required evidence:
A list and/or short descriptions of internal and external support services available to students of the program must be provided.

Standard 7 – Continuous Quality Improvement

7.1 The program has a process for collecting and analyzing graduate performance data.

Critical Criterion

Guidance:
Programs must collect information regarding the competencies of its graduates. A variety of methods may be used including surveys of former students, assessment of clinical competence, follow-up studies of graduate employment, and certification examination attempt and pass rate. Opinions from employers regarding the adequacy of the program in preparing graduates for employment must be sought.

Required evidence:
The program must provide policies and procedures related to continuous quality improvement. Graduate performance data, certification results, employment rate and stakeholder input must be provided.

7.2 Based on the analysis of collected performance data and stakeholder input, the program implements appropriate and timely actions for improvement.

Critical Criterion

Guidance:
The results of ongoing program evaluation must be reflected in changes to the curriculum and other dimensions of the program fostering student achievement and successful completion of the program.

Required evidence:
A description of all actions taken to address identified concerns for the past 3 years must be provided. The program must identify the origin of the recommendation for improvement and if the action was taken as a result of stakeholder input.

7.3 The program assesses the effectiveness of actions taken for program improvement.
Guidance: The program must have a timely process to assess the effectiveness of program changes. If the program change was ineffective, further action is required. ***Required evidence:*** *Documentation of assessment and effectiveness of program changes must be provided. Documentation should include all assessment methods and outcomes of documented program changes. If a change is deemed ineffective the program must describe actions to be taken and a projected date of resolution.*

Appendix A

Common Didactic Curriculum and Performance Objectives

The following curriculum and performance objectives are the foundation for a program curriculum. **This list is not intended to be exhaustive nor is it intended to be prescriptive.** Each program must decide what is required to be included in their program.

Many topics and content areas are included in all 4 program levels. Although the same topic or performance objective may be in the all levels the expectation is that higher level programs will increase in the depth and breadth of the knowledge of that given topic. For example, ocular motility is listed for all levels. At the assistant level the performance objective may be to identify common types of strabismus; the technician level may be to measure common types of strabismus; and the medical technologist may add to measure advanced types of strabismus.

Non-Clinical and Clinical Assistant		
	Content	Performance Objectives
Introduction to Ophthal-mology	1. Clinic and Personnel Functions 2. Medical Ethics, Regulatory, and Legal Issues 3. Communication Skills, Patient Education, and Ophthalmic Counseling 4. Ophthalmic Patient Services and Relations 5. Community Health Eye Care 6. Safety 7. Administrative Duties 8. Medical Terminology 9. General and Ocular Anatomy and Physiology 10. Pharmacology 11. Microbiology 12. History Taking	● apply the principles of universal precautions ● use personal protective equipment when and where it is necessary (e.g. masks, gloves, safety, glasses, gown) ● demonstrate professionalism and ethical behavior in the working environment ● maintain patient confidentiality ● follow laser safety guidelines according to institution policy ● assist the physically and/or visually disabled ● demonstrate asepsis of ophthalmic equipment ● administer topical ocular medications following institutional regulations and guidelines ● inform patients on medications effects and side effects ● communicate effectively ● demonstrate effective interpersonal relationship skills ● assist patients with special needs ● apply and remove eye dressings and shields ● record a complete ophthalmic history ● demonstrate basic microbial control (e.g. sanitation, disinfection) ● spell, define, and use medical terminology correctly
Basic Skills	13. Cardiopulmonary Resuscitation 14. Vital Signs 15. Visual Assessment 16. Visual Fields 17. Pupillary Assessment 18. Lensometry 19. Keratometry 20. Tonometry 21. Supplementary Tests 22. Clinical Equipment and Supplies Maintenance 23. Examination of the Eye and Face	● measure and record vital signs ● record the following visual acuities accurately: distance acuity, near acuity, pinhole acuity,, ● perform colour vision testing with pseudoisochromatic plates ● identify types of lenses without the aid of instruments ● record the prescription of a pair of spectacles and transpose it with a manual lensmeter ● demonstrate cleaning and sanitization of tonometer ● check calibration of tonometers ● perform tonometry ● perform confrontational fields ● prepare and instruct patient for visual field testing ● calculate the required add for visual field testing ● calibrate or check calibration of visual field machine ● perform automated perimetry ● administer Amsler grid test ● perform manual keratometry ● perform corneal topography ● perform corneal pachymetry ● assess pupils and pupillary function ● demonstrate the use of the slit lamp ● assess anterior chamber depth ● maintain ophthalmic equipment
Intermediate Skills	24. Clinical Optics 25. Biometry 26. Eye Diseases 27. Systemic Diseases	● perform optical coherence biometry ● perform A-scan biometry ● perform IOL calculations using standard formulas
Advanced Skills	28. Low Vision 29. Surgical Procedures 30. Refraction (Retinoscopy and Refinement) 31. Contact Lenses 32. Spectacle Skills	● perform automated refraction ● measure vertex distance ● demonstrate knowledge of instructing patients on the insertion, removal, wearing regimen, and care of contact lenses ● set up and assist in office based minor surgical procedures ● set up and assist in non-refractive laser surgery

		● maintain surgical asepsis ● maintain surgical instruments / equipment ● prepare instruments for office based minor procedures

Technician		
	Content	Performance Objectives
Introduction to Ophthal-mology	1. Clinic and Personnel Functions 2. Medical Ethics, Regulatory, and Legal Issues 3. Communication Skills, Patient Education, and Ophthalmic Counseling 4. Ophthalmic Patient Services and Relations 5. Community Health Eye Care 6. Safety 7. Administrative Duties 8. Medical Terminology 9. General and Ocular Anatomy and Physiology 10. Pharmacology 11. Microbiology 12. History Taking	● apply the principles of universal precautions ● use personal protective equipment when and where it is necessary (e.g. masks, gloves, safety, glasses, gown) ● demonstrate professionalism and ethical behavior in the working environment ● maintain patient confidentiality ● follow laser safety guidelines according to institution policy ● assist the physically and/or visually disabled ● demonstrate asepsis of ophthalmic equipment ● administer topical ocular medications following institutional regulations and guidelines ● inform patients on medications effects and side effects ● communicate effectively ● demonstrate effective interpersonal relationship skills ● assist patients with special needs ● apply and remove eye dressings and shields ● record a complete ophthalmic history ● demonstrate basic microbial control (e.g. sanitation, disinfection)
Basic Skills	13. Cardiopulmonary Resuscitation 14. Vital Signs 15. Visual Assessment 16. Visual Fields 17. Pupillary Assessment 18. Lensometry 19. Keratometry 20. Tonometry 21. Supplementary Tests 22. Clinical Equipment and Supplies Maintenance 23. Examination of the Eye and Face	● measure and record vital signs ● record the following visual acuities accurately: distance acuity, near acuity, pinhole acuity, low vision, and in children ● record near point of accommodation and convergence ● perform colour vision testing with pseudoisochromatic plates ● identify types of lenses without the aid of instruments ● record the prescription of a pair of spectacles and transpose it with a manual lensmeter ● demonstrate cleaning and sanitization of tonometer ● check calibration of tonometers ● perform tonometry ● perform confrontational fields ● prepare and instruct patient for visual field testing ● calculate the required add for visual field testing ● calibrate or check calibration of visual field machine ● perform automated perimetry ● perform manual perimetry ● administer Amsler grid test ● perform manual keratometry ● perform corneal topography ● perform corneal pachymetry ● assess pupils and pupillary function ● perform glare testing ● perform potential acuity ● demonstrate the use of the slit lamp ● assess anterior chamber depth ● assess tear function ● demonstrate exophthalmometry ● maintain ophthalmic equipment
Intermediate Skills	24. Clinical Optics 25. Biometry 26. Eye Diseases 27. Systemic Diseases	● perform optical coherence biometry ● perform A-scan biometry ● perform IOL calculations using standard formulas ● use appropriate methods to calculate IOL power post refractive surgery
Advanced	28. Low Vision	● perform automated refraction and manifest refraction (+

Skills	29. Surgical Procedures 30. Refraction (Retinoscopy and Refinement) 31. Contact Lenses 32. Spectacle Skills	and/or – cylinder) ● measure vertex distance ● demonstrate knowledge of instructing patients on the insertion, removal, wearing regimen, and care of contact lenses ● set up and assist in office based minor surgical procedures ● set up and assist in non-refractive laser surgery ● maintain surgical asepsis ● maintain surgical instruments / equipment ● prepare instruments for office based minor procedures
Advanced Skills	33. Ocular Motility - Advanced 34. Supplementary Tests - Advanced 35. Ophthalmic Imaging 36. General Psychology 37. Special Diagnostic Testing	● evaluate and measure strabismus ● assess head postures ● measure stereoacuity ● evaluate versions and ductions ● perform slit lamp/anterior segment photography ● perform external photography ● perform fundus photography ● perform fluorescein angiography ● perform retinal / glaucoma tomography ● describe low vision aids and their uses (optical and non-optical) ● demonstrate specialized color vision testing

Medical Technologist		
	Content	Performance Objectives
Introduction to Ophthal-mology	1. Clinic and Personnel Functions 2. Medical Ethics, Regulatory, and Legal Issues 3. Communication Skills, Patient Education, and Ophthalmic Counseling 4. Ophthalmic Patient Services and Relations 5. Community Health Eye Care 6. Safety 7. Administrative Duties 8. Medical Terminology 9. General and Ocular Anatomy and Physiology 10. Pharmacology 11. Microbiology 12. History Taking	● apply the principles of universal precautions ● use personal protective equipment when and where it is necessary (e.g. masks, gloves, safety, glasses, gown) ● demonstrate professionalism and ethical behavior in the working environment ● maintain patient confidentiality ● follow laser safety guidelines according to institution policy ● assist the physically and/or visually disabled ● demonstrate asepsis of ophthalmic equipment ● administer topical ocular medications following institutional regulations and guidelines ● inform patients on medications effects and side effects ● communicate effectively ● demonstrate effective interpersonal relationship skills ● assist patients with special needs ● apply and remove eye dressings and shields ● record a complete ophthalmic history ● demonstrate basic microbial control (e.g. sanitation, disinfection)
Basic Skills	13. Cardiopulmonary Resuscitation 14. Vital Signs 15. Visual Assessment 16. Visual Fields 17. Pupillary Assessment 18. Lensometry 19. Keratometry 20. Tonometry 21. Supplementary Tests 22. Clinical Equipment and Supplies Maintenance 23. Examination of the Eye and Face	● measure and record vital signs ● record the following visual acuities accurately: distance acuity, near acuity, pinhole acuity, low vision, and in children ● record near point of accommodation and convergence ● perform colour vision testing with pseudoisochromatic plates ● identify types of lenses without the aid of instruments ● record the prescription of a pair of spectacles and transpose it with a manual lensmeter ● demonstrate cleaning and sanitization of tonometer ● check calibration of tonometers ● perform tonometry ● perform confrontational fields ● prepare and instruct patient for visual field testing ● calculate the required add for visual field testing ● calibrate or check calibration of visual field machine ● perform automated perimetry ● perform manual perimetry ● administer Amsler grid test ● perform manual keratometry ● perform corneal topography ● perform corneal pachymetry ● assess pupils and pupillary function ● perform glare testing ● perform potential acuity ● demonstrate direct ophthalmoscopy ● demonstrate indirect ophthalmoscopy ● demonstrate the use of the slit lamp ● assess anterior chamber depth ● assess tear function ● demonstrate exophthalmometry ● maintain ophthalmic equipment
Intermediate Skills	24. Clinical Optics 25. Biometry 26. Eye Diseases	● perform optical coherence biometry ● perform A-scan biometry ● perform basic B-scan screening

	27. Systemic Diseases	● perform IOL calculations using standard formulas ● use appropriate methods to calculate IOL power post refractive surgery
Advanced Skills	28. Low Vision 29. Surgical Procedures 30. Refraction (Retinoscopy and Refinement) 31. Contact Lenses 32. Spectacle Skills	● perform automated refraction, retinoscopy and manifest refraction (+ and/or – cylinder) ● measure vertex distance ● demonstrate knowledge of instructing patients on the insertion, removal, wearing regimen, and care of contact lenses ● set up and assist in office based minor surgical procedures ● set up and assist in non-refractive laser surgery ● maintain surgical asepsis ● maintain surgical instruments / equipment ● prepare instruments for office based minor procedures
Advanced Skills	33. Ocular Motility - Advanced 34. Supplementary Tests - Advanced 35. Ophthalmic Imaging 36. General Psychology 37. Special Diagnostic Testing	● evaluate and measure strabismus ● assess head postures ● measure stereoacuity ● assess fusional amplitudes ● evaluate versions and ductions ● perform slit lamp/anterior segment photography ● perform fundus photography ● perform fluorescein angiography ● perform retinal / glaucoma tomography ● describe low vision aids and their uses (optical and non-optical) ● demonstrate specialized color vision testing
Advanced Skills	38. Supervision and Training Support 39. Electrophysiology 40. Physiological Optics 41. Abnormalities of Binocular Vision	● perform ERG, VEP, and EOG

Appendix B

Performance Objective	Didactic	Laboratory	Skills
Measure intraocular pressure with a Goldmann tonometer	Tonometry Lecture 7 Objective 5	Tonometry Lab	Tonometry 5
Measure a progressive lens with a manual lensmeter	Lensometry Lecture 6 Objective 3	Lensometry Lab 5	Lensometry 8
Measure versions and ductions	Ocular Motility Lecture 12 Objective 3	Motility lab 2	Motility 2, 3

This table is a sample of cross referencing matrix illustrating the program's curriculum with a description of where each component is taught. Each performance objective should be described under the didactic, laboratory, and skills. The didactic references lecture, laboratory references skills practice time in a controlled lab setting under direct supervision, and skills references the tasks students are responsible for completing within the program's published guidelines.

Definitions of Key Terms

Accreditation
Is a process of voluntary, non-government self-regulation that recognizes educational institutions and/or programs that have been found to meet or exceed established standards of quality.

Accreditation Review Process
Begins with the submission of an application, fee, and a self-study and ends with an accreditation action made by the ICA Board of Directors.

Accredited
The outcome of the successful completion of accreditation.

Adequate and/or appropriate supervision
The direct supervision of a student in the clinical setting by a certified/registered/licensed/academically qualified practitioner at all times until student competence in a given procedure is achieved. Once competence in a given clinical procedure is achieved, students must still be supervised by a certified/registered/academically qualified practitioner but the supervision may be indirect provided the supervisor is on the premises and in a position to assist the student immediately, if required.

Administrative Probation
A program is placed on administrative probation when it fails to comply with the administrative requirements defined by ICA.

1. Failure to submit a self-study report on time
2. Failure to complete an annual report
3. Failure to pay necessary fees or invoices.

Annual Reports
ICA requires annual reports be submitted by all accredited programs in order to comply with an administrative requirement of the Standards and to maintain accreditation. Annual Reports are due on or before October 31.

Application for accreditation
An application for accreditation is the first step in the process of receiving initial approval and accreditation. Once the application form has been completed and requisite fee received, the program's application will be reviewed by a Board Member Reviewer.

Assessment
The process by which a program's evidence is reviewed by a survey team to ascertain whether the evidence meets the accreditation criteria.

Board Member Reviewer
Member of the ICA Board of Directors assigned to review a program.

Certification
The process by which the International Joint Commission on Allied Health Personnel in Ophthalmology (IJCAHPO) recognizes individuals who have attained predetermined competency levels through standardized testing for ophthalmic medical technician professions.

Clinical education
The planned learning experiences for students in an actual clinical environment (e.g., hospital, clinic or laboratory).

Clinical Site
The terms clinical education, directed clinical experience, field-work, and practicum refer to the planned learning experiences assigned as an integral part of or complement to didactic courses. Clinical education is designed to provide initial and basic experiences in direct observation and then in participation in selected practical activities, under the supervision of qualified, competent personnel (as defined in the Standards). The clinical portion of a structured educational program is usually specifically related to prior or ongoing didactic education.

Competency
A behavior (or set of behaviors) that demonstrates or reflects an element or elements such as knowledge, skills or attitudes required by an individual to perform a given task. There should be congruence between competencies and learning outcomes.

Competency attainment
An ophthalmic training program must provide students with an educational experience that ensures a logical progression toward competency attainment. This progression includes the following:

> **Clinical simulation**
> A structured learning activity in which key elements of the practice setting of a health profession are replicated, for example, through the use of mock patient cases or specimens, mannequins, clinical scenarios or standardized patients. Simulation activities can range from performance of simple clinical procedures to clinical assessment and decision-making in a high-fidelity re-creation of a complex patient case. As well, the opportunity to manage simulated patient cases can assist in the development of clinical readiness for direct patient contact. Clinical simulation is also useful for competency attainment in low-frequency and/or high-risk clinical procedures
>
> **Direct patient contact at clinical sites**
> An ophthalmic training program also enables students to attain and demonstrate competencies through direct patient contact during clinical rotations. Students have the opportunity to integrate knowledge, skills, attitudes and judgment in real clinical situations that require problem-solving, communication and critical thinking to address patient needs and conditions. A program makes every effort to optimize a student's experience with real patients; however, it is recognized that it may not be feasible for the student to perform all competencies in actual clinical situations.

The outcome of a well-integrated learning experience is a practitioner who has attained the competencies required for safe and effective practice at entry to the profession.

Competency-based objective
A behavior reflecting a specific element or elements such as knowledge, skills or behaviors to be attained by the learner in achieving a given competency. Competency-based objectives are developed by individual programs according to the ICA and IJCAHPO guidelines.

Components of an objective (as identified in traditional approaches to behavioral objectives):

> **Condition** - A boundary placed on the learner.
> **Act** - The behavior performed by the learner.
> **Standard** - An acceptable level of performance of the act by the learner.

Objectives are sometimes classified as enabling/learning objectives and terminal objectives. Enabling/learning objectives refer to specific behaviors demonstrated by learners as they proceed toward achieving the terminal objectives or competencies.

Compliance
The performance level of a program that meets all the critical criteria for a standard and minimum number of total criteria for each standard.

Complaint
A formal letter of grievance written and signed by an individual in reference to a program's compliance with the Standards. Complaints are fully investigated by the Board and can result in probation.

Continuing Accreditation
Granted to a program when it is reevaluated at specified intervals. It is awarded for a maximum period of six years.

Criterion
The acceptable level of performance against which actual performance is assessed in determining a program's compliance with a requirement.

Critical criterion
An essential element of program performance for compliance with a requirement.

Denial of Accreditation/Approval
Accreditation may be denied from a program seeking initial accreditation if it does not comply with the Standards.

Didactic delivery site
A location where didactic education is delivered. A program may have one didactic delivery site or may have multiple sites, i.e., satellite sites.

Didactic education
The planned learning experiences for students in an actual or virtual academic environment (e.g., actual or virtual classroom, computer-based learning center, or audio-visual center).

Distance Education
A form of education where some or all regularly scheduled classroom time (in a traditional educational program) is replaced by required activities completed and managed online.

Formative assessment
Assessment that takes place during instruction in order to provide direction for improvement for individual students. The information gathered is used for the specific purpose of helping students improve while they are still gaining knowledge and practicing skills.

Guidance
The guidance accompanying the Standards provide explanations intended to assist in interpreting the Standards and to provide recommendations on how to meet and/or exceed the Standards.

Inactive Status
May be granted to a program upon request, for up to two years. Inactive status is not renewable. Students may not be accepted into the program while it is inactive. If, at the end of two years, the program wishes to remain inactive, it may choose to withdraw accreditation. If no response is received from the program, ICA will withdraw accreditation. Program fees must be paid while a program is inactive.

Initial Accreditation
First status of accreditation granted to a program that has demonstrated substantial compliance with the Standards. It is awarded for a maximum period of two years, at which time the full accreditation application must be completed.

Laboratory Classroom
Classroom "Lab" experience is defined as a training program's lab setting where students perform tasks on other students. Classroom labs are intended to assist the program's evaluation of the strengths and needs of students. Classroom labs should help to guide instruction and measure progress with a final goal of achievement of tasks and procedures. Classroom labs do not qualify for "clinical experience".

Learning resource
An element or elements used to support student education, including classroom and library facilities, laboratory and clinical facilities, written and audio-visual materials, equipment and clinical experience.

Limited Site Visit (revisit or follow-up)
A limited onsite assessment of a program against one or more criteria, conducted when the program's follow-up report does not provide clear evidence of compliance and further evidence of the program's progress toward compliance is required to avoid an assessment of non-compliance and withdrawal of accreditation. All expenses incurred for the Site Visit (including but not limited to meals, housing, and transportation) are the responsibility of the program.

Medical Director
The medical director must be an ophthalmologist, who meets the legal requirements to practice in the jurisdiction in which the program is based. The medical director of the program must provide competent direction or guidance and instruction (as appropriate) to ensure that the medical components of the curriculum, both didactic and supervised clinical practice, offer correct, timely information, and meet professional standards of patient care.

Non-compliance
The performance level of a program that fails to meet one or more critical criteria for a standard for accreditation or the performance level of a program that meets less than the minimum number of criteria for a standard.

Online Education
A form of education that focuses on teaching methods and technology with the aim of delivering knowledge to students who are located remotely. Online education must offer two-way communication between teacher and learner and fall under the oversight of an educational institution.

Partial compliance
The performance level of a program that fails to meet one critical criterion for a standard for accreditation or the performance level of a program that fails to meet the minimum number of criteria for a standard.

Peer review
An examination and evaluation of the performance of a program by a survey team or committee made up of individuals who are from or affiliated with similar accredited ophthalmic training programs.

Performance data
Data specifically collected from all relevant program stakeholder groups for the purpose of informing timely evidence-based actions for program quality improvement.

Practitioner
A practicing member of a designated health science profession.

Preceptor
An expert or specialist, such as a technologist or practitioner, who provides practical experience and training to a student.

Probation
Temporary status of accreditation granted when a program does not continue to meet accreditation Standards but should be able to meet them within the specified time.

Program
The integrated resources and educational components of all sites (didactic and clinical) participating in the delivery of the educational process.

Program Director
The person responsible for the organization, administration, periodic review, continues development and general effectiveness of a program.

Program goal
A stated purpose of an educational program.

Program outcome
A result achieved by an educational program. There should be congruence between program outcomes and program goals.

Program personnel
Individuals who have a role in administering or facilitating the educational process, including the provision of medical or educational input and advice.

Reconsideration
Any program that receives a negative accreditation recommendation can request reconsideration prior to the action being taken. To request reconsideration, the program has 10 days from the date of the letter notifying it of the negative recommendation to express intent to file a response.

Required Evidence
An outcome that a program must demonstrate to achieve accreditation. Compliance with a requirement requires a program to meet the critical criteria for that requirement, and at least two-thirds of all criteria for the requirement.

Self-Study Report
The self-study is a formal process during which an educational program critically examines its structure and substance, judges the program's overall effectiveness relative to its mission, identifies specific strengths and deficiencies, and indicates a plan for necessary modifications and improvements.

Site Visit
Required during a comprehensive review for the clinical ophthalmic assistant, ophthalmic technician, and ophthalmic medical technologist programs. A one day to day-and-a-half visit to the program by an ICA site visit team to evaluate how accurately the self-study reflect the status of the program**,** and to answer any additional questions that arise. All expenses incurred for the Site Visit (including but not limited to meals, housing, and transportation) are the responsibility of the program.

Site Visit Findings Letter
A letter sent to the program showing the findings of the site visit. The letter contains:

- Factual findings including citation of areas of strength
- Identification of weaknesses and suggestions for improving the program
- Specific Standards must be cited in noncompliance identification of Standard deficiencies necessitation action.

Site Visit Team
Comprised of two ICA-approved Site Visitors. A Site Visitor must be an ophthalmologist, who has the educational credentials and meets the legal requirements to practice medicine, or a certified allied ophthalmic personnel (AOP) at or above the level of the program that is being reviewed.

Sponsoring Institution
The institution where the training program is located.

Standard
The Standards are the minimum requirements of quality used in assessing programs that prepare individuals to enter the ophthalmic medical technician profession. The extent to which a program complies with these Standards determines its accreditation status. The Standards constitute the minimum requirements to which an accredited program is held accountable, and are printed in regular typeface. Programs are only required to meet the Standards.

Summative evaluation
Evaluation that occurs at the end of important segments of student learning. It is used to summarize and communicate what students know and can do with respect to curriculum expectations.

Unaccredited
A program that does not meet the Standards. An accredited program may become unaccredited pursuant to voluntary withdrawal by the program, failure to pay fees or withdrawal of accreditation by ICA.

Withdrawal of Accreditation (Involuntary)
Accreditation may be withdrawn from an accredited program if it is not in compliance with the Standards.

Withdrawal of Accreditation (Voluntary)
Granted when the sponsoring institution request that its program no longer be accredited by ICA.