



# EXAM CANDIDATE HANDBOOK

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Exercise Oncology Instructor™  
Certification

**Karen Wonders, PhD, FACSM**



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# Introduction

This Candidate Handbook provides information about Maple Tree Cancer Alliance's (MTCA) Exercise Oncology Instructor™ (EOI) certification and the certification examination it offers fitness professionals who want to work with cancer patients. This Handbook includes information dealing with EOI Certification Board Mission and Objectives along with:

- EOI certification training program and examination
- Eligibility requirements
- Applying and sitting for the EOI Exam
- Exam administration and results
- Rules of conduct and disciplinary action
- Awarding of credentials
- Maintaining credentials through recertification

MTCA defines a candidate as someone who is considering or preparing to sit for the EOI certification exam, and certified professional as those who have successfully completed the EOI certification exam and have received the EOI credentials. This Handbook is written to provide essential information to candidates and certified professionals. All EOI Candidates and certified professionals are required to read this Candidate Handbook. The policies, procedures, rules, and obligations set forth in this Handbook and in MTCA's website-published Terms & Conditions are binding on all candidates and certified professionals.

# Exam Candidate Handbook

## **MTCA Certification Board**

### **MISSION**

MTCA exists to improve the quality of lives of individuals who battle cancer. We accomplish this through individualized, supervised exercise. The mission of the Exercise Oncology Instructor (EOI) certification is to prepare and qualify health professionals to plan and implement safe and effective exercise programs for individuals who are battling cancer. The EOI develops and administers whole body exercises designed to enhance cardiorespiratory fitness, body composition, muscular strength and endurance, and flexibility. In addition, the EOI encourages exercise adherence to help improve health-related physical fitness and manage disease.

### **OBJECTIVES OF THE CERTIFICATION BOARD**

The objectives of MTCA's Certification Board are as follows:

- Maintain complete autonomy in the certification process to ensure the examination remains unbiased and fair for all individuals involved. Autonomy includes being a voluntary group of volunteers not financially tied in any way to MTCA.
- Provides suggestions and approvals for the MTCA budget, as it pertains to the certification program, and establishes all pricing involved with the certification program.
- Assists with selection and ensures that all Subject Matter Experts (SMEs) utilized in the Job Task Analysis (JTA) and Exam Development Process are qualified and impartial related to education/training leading to initial certification.
- Adopts certification programs and certification board policies and procedures for resolving professional and ethical concerns as it relates to the certification graduates and the examination process.
- Establishes, administers, and regulates policies and procedures for resolving professional and ethical concerns as it relates to the certification graduates and the examination process.
- Ensures as the industry and needs of the industry change, the certification exam and processes change at the same time and pace.
- Assists with development of JTA and examinations which assess the knowledge and skills required for the role of a professionally certified EOI.
- Ensures the quality of the EOI Exam and processes meet the NCCA Standards and remain at the highest levels within the industry.
- Elects and/or approves successive members of the Certification Board, ensuring the fitness industry is adequately represented within the Board and no member/s has/have excessive influence.
- Ensures that anyone who has applied and is eligible, can attempt the certification exam, and that the policies and procedures are clear and precise to enable ease of understanding and adequate completion of requirements.

### **Certification Board Contact Information**

425 N Findlay St., Suite 16  
Dayton OH, 45404

## **Non-Discrimination Policy**

MTCA and its designated test vendor, MonitorEDU, does not discriminate against any individual because of age, gender, national origin, religion, sexual orientation, veteran status, disability, or any other protected class. Both MTCA and MonitorEDU endorse and adhere to the principles of equal opportunity.

## **Conflict of Interest Policy**

Maple Tree Cancer Alliance keeps record of and enforces signed conflict-of-interest agreements with all personnel involved in certification decisions and MTCA EOI examination development, implementation, maintenance, delivery, and revision.

Personnel who have a conflict of interest in a particular circumstance, but not in their overall capacity to serve, will be recused from certain tasks, discussions, or decisions. In these cases, the MTCA Certification Board will elect an alternative to serve in their stead.

## **Scope of Practice**

### **INTRODUCTION**

When working as an EOI, it is important to consider not only the physical changes, but also the emotional and psychological toll that comes along with being a cancer patient. Many of our patients are husbands, wives, parents, and working individuals who are trying to balance a busy lifestyle while managing their cancer care. Therefore, it is critical for you, as an Exercise Oncology Instructor, to consider these external factors when working with patients.

### **BEHAVIOR CHANGE**

For many of the patients we serve, exercise has not been a part of their lives, up to this point. This can make it challenging for some to begin an exercise program, especially while also navigating a cancer diagnosis. As an Exercise Oncology Instructor, it is helpful to understand various concepts of health behavior changes and methods used to encourage healthy lifestyles.

First, identifying barriers to change is key in establishing a sound foundation for adopting new healthy behaviors. Some barriers may include time commitments, work obligations, family needs, or fatigue from cancer treatment. Speak with your patients to help them identify any such barriers that may hinder them from making exercise a part of their daily lives. Help to modify workouts for your patients or offer suggestions on how to increase physical activity during the day. Suggestions such as taking the stairs, standing while washing dishes, or taking a walk during lunch breaks are great options for making physical activity a part of a daily routine.

Next, find out what motivates your patients and work to establish goals toward making healthy choices. Ask your patient, what is their "why" for wanting to make the change. Family, friends, or personal motives may encourage patients to seek to embrace new lifestyle changes, such as exercise. We have found that a strong support system is key for our patients when it comes to keeping a commitment to staying healthy through exercise. Encourage patients to make exercise a way of life for the WHOLE family. Starting something new is much easier when patients are not alone!

In general, remember to help set the foundation for healthy change by navigating barriers and establishing support that will help motivate your patient to continue on their fitness journey.

## **Maple Tree Cancer Alliance EOI Certification**

The MTCA EOI certification program includes, at minimum, a certification examination developed pursuant to psychometric and NCCA standards and an administration process that includes issuance of credentials, a recertification process, and a professional Code of Ethics.

## **ABOUT THE EXERCISE ONCOLOGY INSTRUCTOR CERTIFICATION**

Those pursuing the Exercise Oncology Instructor certification are exercise physiologists and/or qualified professionals. You must have a bachelor's degree in Exercise Science, or related, or be within 180 days of graduating with this degree. The purpose of the EOI certification is to ensure that certificants have a baseline knowledge of exercise physiology in a healthy population. MTCA's training materials and workshop will teach the exercise professional to design safe and effective individualized exercises for an individual who is undergoing treatment for cancer. The examination is 100 questions and requires a passing score of 80%. Those who pass the certification exam will be issued the mark of Certified Exercise Oncology Instructor (EOI).

## **EXAM ONLY OPTION**

The EOI Exam Only allows the candidate to take the EOI certification only. The purchase of MTCA preparation materials is not required to become eligible to sit for the EOI exam and does not guarantee a passing score on the exam. MTCA does not imply that the certification preparation materials are the only, or preferred route for preparing the exam. Candidates who choose to participate in the certification preparation materials will not be given an unfair advantage when taking the exam. Candidates who pass the examination will be awarded the EOI credential. This option is most appropriate for candidates who have received formal education in related fields, such as exercise physiology, allied health, human biomechanics, or athletic training and have significant experience with clinical exercise physiology.

## **EXAM PERIOD AND EXTENSIONS**

The exam enrollment period is one hundred and eighty (180) days from opening the EOI Certification Preparation Course (Materials + EOI Exam), or sixty (60) days from registration in the Exam Only option. This means that candidates have sixty (60) or one hundred and eighty (180) days to complete their preparation, obtain their CPR/AED certification and successfully take the EOI Certification examination. You may purchase a program extension of sixty (60) days online or by completing the Program Extension Form and emailing to [info@mapletrcanceralliance.org](mailto:info@mapletrcanceralliance.org). Only three extensions may be purchased. All fees, including the Program Extension Fee, are subject to change and you should reference the MTCA website to confirm the current fee structure. Please note that if you enrolled through a program offered by a MTCA academic partner, the enrollment period may be adjusted to coincide with the term of your school's program.

## **CANDIDATE ELIGIBILITY**

To be eligible to sit for the EOI exam and receive certification, each candidate must:

1. Have obtained or be within no more than 180 days of successful completion of all requirements needed to obtain a bachelor's degree in Exercise Science, or related field, or other equivalency test recognized by the candidate's state of residency, or official transcript reflecting equivalent education as evaluated by the American Association of Collegiate Registrars and Admissions Officers for secondary education.
2. Obtain and maintain Adult CPR and AED certifications. Candidates will be required to provide proof of current CPR/AED certification prior to being admitted to sit for the EOI examination. Certified professionals must also have a current CPR/AED card when applying for recertification. All CPR/AED courses must have a hands-on training component.

Candidates must have these requirements to ensure they have the proper knowledge and understanding the work with a healthy population, and to ensure the safety of the cancer patients they will be working with

## **APPLICATION AND ATTESTATION PROCESS**

MTCA candidates are required to attest to understanding and agreeing to certain conditions before registering for the EOI study program and/or EOI exam. The attestations are considered the "application process". The attestations are made when registering for the program with Materials + EOI Exam or EOI Exam Only, and again before taking the exam.

Below are the statements that must be agreed to through attestation:

- I have been advised that the Exam Candidate Handbook is available for review at [www.mapletrcanceralliance.org/get-certified/resources](http://www.mapletrcanceralliance.org/get-certified/resources) and I agree to abide by its rules and policies including the eligibility requirements, testing rules of conduct, and the EOI Code of Ethics.
- I have read the terms and conditions and privacy policy found at [www.mapletrcanceralliance.org](http://www.mapletrcanceralliance.org).



- I am the candidate who will take the certification exam and no other person is completing this attestation on my behalf. Further, I will present a valid, government-issued identification with a photograph at the time of testing.
- I possess either a bachelors' degree, or the equivalent, or will have it within 180 days of taking the certification exam.
- I understand MTCA conducts monthly random audits and I may be asked to provide proof of a diploma.
- I will have a valid Adult CPR/AED certification that includes live, hands-on training before taking the certification exam and must present proof at the time of testing to be admitted.
- I understand that if I purchase the EOI Exam Only, I have 60 days to take the final examination via Live Remote Proctoring. If I purchase the Materials + EOI Exam, I have 180 days to take the final examination.
- By clicking "I Agree", I have read and understand the attestations above, and I further understand that MTCA may revoke my EOI credential if I provided any false information or violate the testing rules of conduct or MTCA Code of Ethics.

### **AUDIT OF ELIGIBILITY**

All candidates who successfully complete the MTCA EOI certification exam are subject to an audit to confirm their eligibility and/or CPR status, and may request supporting documentation.

Every month, candidates who received a passing score on the MTCA EOI certification may be audited to verify current CPR certification status. If contacted in this regard, candidates must provide documentation of their current CPR status within 30 days of request by MTCA.

Every month, 15% of candidates who received a passing score in the previous month for the MTCA EOI credential will be audited for completion of an academic degree using a third-party vendor. If a degree cannot be confirmed using the third-party vendor, MTCA will contact the candidate and request an official transcript noting the completed degree, or showing that the candidate is within 180 days of graduation. Transcripts must be submitted within 30 days of MTCA request.

MTCA reserves the right to revoke the credential of any individual who cannot verify their eligibility and/or their current CPR certification as part of the MTCA audit verification process.

MTCA will contact the candidates by email; therefore, it is imperative that candidates keep their contact information updated with MTCA.

### **ELIGIBILITY EXCEPTION REQUESTS**

Candidates may request an exception to eligibility requirements to sit for the certification exam by completing the Exception Request Form and submitting supporting documentation.

The exception request will be reviewed and decided upon by the Executive Committee, a committee of the Certification Board. The Committee's decision will be provided to the candidate in writing. Decisions of the Board are final.

See the "Appeals" section of this Candidate Handbook for more information.

MTCA reserves the right to uphold eligibility requirements as established by the Certification Board.

### **CONFIDENTIALITY AND RECORDS RETENTIONS**

MTCA is governed by the federal laws of the United States and follows all laws and regulations regarding the storage, usage, and destruction of confidential information.

Confidential information (non-public information including but not limited to addresses, phone numbers and financial account numbers, etc.) is protected by federal, state, and local laws or regulations. To protect the privacy of our candidates and certified professionals, MTCA's database of personal information is accessible only by authorized staff and authorized contractors operating under a privacy and nondisclosure agreement.

The following individual data is collected and maintained in a secure database indefinitely:

- First and last name
- Email address
- Mailing address
- Phone number
- Club details, if employed by a sponsoring club
- Account username and password
- EOI Identification Number (MTCA ID#)
- Credit card data (for installment plans only)
- Purchase history
- Number of exam attempts
- Exam score/s
- Continuing education courses (CECs) logged into profile
- Copies of CEC certificates of completion and CPR/AED certificates of completion
- Recertification notes and certificates

The following employees and contractors have access to all or parts of this confidential information.

- MTCA Administration staff (Vice President of Operations)
- MTCA Certification Board Liaison (National Director of Certification)
- MTCA Certification Board
- MTCA Customer Service Team
- MTCA Accounts Assistant
- MTCA Chief Technology Officer
- IT Contractor (MonitorEDU)
- Computer-based testing exam delivery (ClassMarker)

Individual records are considered confidential information and will not be disclosed without the written consent of the person in question (using the Consent for Information Release) unless MTCA is required to do so by law or court order. Unless required by law to be provided to a regulating agency, score results are provided only to the candidate, and where applicable, to the candidate's sponsoring club. Test scores are not provided over the phone. Test scores remain in the MTCA database indefinitely and may be required to provide evidence of validity and reliability of the exam.

Information that is not considered confidential and may be shared with schools, employers, inquiring clients of certified professionals, regulatory or licensure body, and other concerned third-parties includes general exam results (whether a candidate passed an exam), certification status, certification or MTCA ID number, and the current status of a previously-certified



individual. This information can also be accessed from the [mapletreecanceralliance.org](http://mapletreecanceralliance.org) website with a “Search Trainers” function. Only the candidate’s name, MTCA ID#, type of certificate, date completed, and expiration date, if any, is provided.

The following data is also maintained by MTCA in aggregate, indefinitely, to ensure compliance with the NCCA record-keeping requirements and best practices of record keeping:

- Names of individual applicants becoming candidates
- Exam scores for all exam attempts
- Names of currently certified professionals
- Names of previously certified professionals

Information in the MTCA database, such as pass rates, number of certified professionals, score trends, etc., may be used in the aggregate (summarized across a group of individuals) for the purpose of research reports, marketing, partner relations and other published data. Additionally, schools, employers or MTCA partners may be provided aggregated data (e.g., summarized across all students of an institution, all employees of an employer, or other grouping, provided that there are enough included individuals to assure that data pertaining to any one individual cannot be deduced) reflecting the Pass/Fail percentage, recertification rates, and other data points collected by MTCA.

Please see the MTCA Privacy Policy, also found at the bottom of the MTCA website at [www.mapletreecanceralliance.org](http://www.mapletreecanceralliance.org), for more information about data collected by MTCA and the use of such data by MTCA.

Candidates and certified professionals may update their personal information at any time by logging into their MTCA account and making the updates in the “profile” section. Name change requests can be made by contacting MTCA directly at [info@mapletreecanceralliance.org](mailto:info@mapletreecanceralliance.org) or 937-414-8400.

Should a candidate or certified professional wish to request that their confidential information be shared, they must complete the EOI Consent for Information Release.

MTCA shall indefinitely retain records of all candidates and current or former MTCA EOI Certified Professionals as long as they remain affiliated with MTCA as an organization, or until they request in writing that the information be removed. While public records of their information will then be removed, MTCA will retain the member’s records securely for a period of five years. Records of MTCA continuing education providers shall be retained for five years. Professionals holding an MTCA credential are encouraged to retain certification and continuing education information for a period of four years.

## **RESTRICTION OF ACCESS**

Personnel with access to confidential examination items are not eligible for the MTCA EOI examination, and are restricted from developing or delivering preparatory courses or materials. Once access has ended, personnel will continue to be restricted for up to ten (10) years.

## **Exam Registration**

### **GETTING STARTED**

In order for exam candidates to purchase/register for Materials + EOI Exam or Exam Only option, they may do so at our online registration portal.

Online registration: [www.mapletreecanceralliance.org/get-certified](http://www.mapletreecanceralliance.org/get-certified)

The purchase is made using credit or debit card (i.e. Visa, MasterCard, or American Express). Following the paid registration, exam candidates will receive a confirmation email that will include a receipt.

Candidate Profiles are created at the time of purchase. Candidates can access their online self-study program or exam only option by logging into the EOI website with their account login.

Exam candidates are instructed to review the information in the three (3) content domains of the EOI Exam and have an adequate knowledge base to ensure the greatest likelihood of passing the EOI Exam prior to scheduling the exam appointment.

***It is essential that you provide and confirm that the following information is always current and accurate:***

**1. Name** Your name must match the name you use on government-issued identification. You should not use nicknames or other substitute names. Your certification and credentials will be issued under the name in your candidate profile. You will not be allowed to sit for your certification examination unless you present a current and valid government-issued photo ID. Accordingly, you must be sure to register for your exam using the exact same name that appears in your candidate profile and on your government-issued identification. If your name changes due to a change in marital status or a legal name change, you must be sure to have the name change reflected in your candidate profile but only after you have arranged for government-issued identification using your new name.

To change your name with MTCA, you will need to provide an official duplicate of the legal document reflecting the change of name. This document must contain the official seal of the government entity issuing the document. MTCA cannot accept a photocopy of the official document. Along with the document, you must provide your previous name, current mailing address, telephone number at which you can be reached and current personal email address. MTCA may need to request additional documentation to confirm your identity before processing the name change in its system.

Request for name changes should be sent to [info@mapletreecanceralliance.org](mailto:info@mapletreecanceralliance.org)

**2. Contact Information** You are advised to provide and keep your contact information current always. It is important that MTCA be able to provide you with information concerning your certification and credentials. You are encouraged to provide a personal email address when you create your candidate profile rather than an email address associated with a school or employer so that MTCA is able to contact you even after you have changed schools or employers.

## **EXAM DELIVERY**

The EOI Exam may ONLY be delivered via MonitorEDU using computer-based testing and cell phone webcam technology. A contract is in place with MonitorEDU which includes duties and responsibilities as well as liabilities. The exam will not be delivered by MTCA employees or certification board members, nor will it be delivered in a paper and hand-scored format. MTCA currently contracts with MonitorEDU, an independent testing vendor. Instructions for testing with MonitorEDU are described later in this document.

In order to not unreasonably limit access to certification, MTCA has partnered with MonitorEDU for exam administration to ensure candidates may take the Materials + EOI Exam at their convenience. MonitorEDU offers Live Remote Proctoring for candidates to take their exam virtually. MonitorEDU operates 24 hours a day, 7 days a week, 363 days a year, allowing candidates to take the exam at nearly any time.

## **PROCEDURES FOR ACCOMMODATIONS/ADA COMPLIANCE**

The MTCA EOI certification complies with the Americans with Disabilities Act of 1990 (ADA). To ensure equal opportunities for all qualified persons, MTCA will make reasonable testing accommodations for certification candidates when appropriate and consistent with such legal requirements. MTCA will consider requests for testing accommodations related to any MTCA Certification exams from certification candidates with a documented disability that substantially limits the candidate's sensory, manual, speaking, or other functional skills, including a disability that significantly impairs the candidate's ability to arrive at, read or otherwise complete the examination. Accommodations can include additional time to complete the exam or use of approved auxiliary aids. MTCA requires that each candidate requesting a testing accommodation complete and submit this form by email within 30 days prior to taking the certification exam. A physician or other qualified professional who has made an individualized assessment related to the candidate's disability must provide the required information concerning the disability

and the requested accommodation. A qualified professional is a licensed or otherwise properly credentialed individual who possesses expertise in the disability for which an accommodation is sought. The information and any documentation that the candidate provides regarding his/her disability and the need for accommodation(s) will be treated as confidential.

## REQUESTING ACCOMMODATIONS

To be considered for special accommodations, a candidate must complete the MTCA Request for Accommodations Form, located at [www.mapletreecanceralliance.org/getcertified/resources](http://www.mapletreecanceralliance.org/getcertified/resources).

Please be aware that submission of a request for an accommodation does not guarantee testing accommodations. Decisions will be made on a case-by-case basis considering the information submitted and in accordance with the law.

Requests for accommodations must include a letter, written no more than two years earlier than the date of the request, from an objective physician or healthcare professional qualified to diagnose the disability or medical condition and render an opinion as to the need for an accommodation. An "objective" professional cannot be the candidate requesting the accommodation or a relative of the candidate.

*The letter from your qualified professional MUST include the following:*

1. The specific disability/diagnosis. Mental/emotional disabilities must be accompanied by a numerical DSM-IV classification code.
2. A brief explanation of how this condition limits the candidate's ability to take the exam under standard conditions.
3. If this is not a permanent disability or diagnosis, include date first diagnosed, approximate duration, and method used to make the diagnosis.
4. State specifically the accommodation(s) required. Requested accommodations should be adequate to address the candidate's specific disability or diagnosis without creating an unfair advantage. Examples of accommodations include extra time, a reader, a recorder, or a separate room. Accommodations are provided to qualified candidates with disabilities to the extent that such accommodation does not fundamentally alter the examination or cause an undue burden to MTCA or the test administration site. The cost of excessive accommodation requirements is to be borne by the candidate (i.e., electronic communication equipment, etc.).

Candidates who begin their online examination and who have not made a prior request for a special accommodation will be offered the opportunity to take the exam without the accommodation.

Candidates with blood sugar disorders are not required to get prior authorization for small hard candy items at the examination station. Candidates will be asked to remove the items from plastic wrappers and remove the wrappers from the testing room.

MonitorEDU and MTCA comply with the standards set forth within ADA. Proctors will make every effort to assist in the accommodation of examination needs of candidates with disabilities.

If a candidate appears to be having difficulty taking an examination, the proctor will inquire if there is anything that can be done to improve the candidate's examination experience. Actions such as adjusting the contrast of the monitor, adjusting the chair height, or adjusting the screen angle will be undertaken immediately.

## TAKING YOUR EXAM

All MTCA EOI exams are administered via live remote proctoring by MonitorEDU, an independent testing vendor. Information about MonitorEDU can be found at <https://monitoredu.com/>.

MonitorEDU offers 24/7 live remote proctoring and examinees do not need to schedule ahead of time. When you are ready to take your EOI certification exam, click "Start EOI Exam". You will be redirected to MonitorEDU where a Live Remote Proctor will greet you and help you set up for your exam. The process for taking your exam can be found in the Policies and Procedures

Manual.

It is VERY important that you use the same exact name as what is in your MTCA account and on your government issued identification. Your proctor will have a roster with the names of those permitted to take the EOI examination.

***Please note that you will not be admitted into the examination if:***

1. Your identity cannot be confirmed with a current and valid government-issued photo ID.
2. The name on your identification does not match the name provided to MTCA.
3. You do not present a current CPR/AED certification card which has a hands-on practical.

**EXAM CHECK-IN**

You will need to bring a current and valid government-issued photo identification and a current CPR/AED certification card (with hands-on practical) to the examination. Only the individual named on the exam registration roster will be permitted to take the certification examination. No substitutions are permitted. Accordingly, the name on your government-issued photo identification must match the name on file with MTCA and the name provided at the time of the exam registration. You will not be permitted to take the examination if the name on your ID does not match the name on the roster provided by MTCA.

You will need to present a copy of a current CPR/AED certification card from an approved provider which includes the live, hands-on practical. Approved providers are listed in the "Policies and Procedures Manual".

Candidates MUST take the exam within 12 months of the original purchase date.

**FAILURE TO APPEAR OR INVALID/EXPIRED ID FOR AN EXAM**

If you do not have the required CPR/AED certificate or have an invalid/expired ID for the certification exam, you will not be permitted to take the examination at that time. You are not entitled to a refund. You will need to follow MTCA's Exam Retest procedures, found in this handbook.

Under certain circumstances, MTCA, at its sole discretion, may waive the retest fee for a failure to appear or invalid/expired ID. MTCA will consider the following circumstances: serious illness suffered by you or an immediate family member; death of an immediate family member; disabling traffic accident, court appearance, or jury duty; or unexpected military call-up. To receive a waiver, you must email a letter describing the circumstances and provide supporting documentation. Possible documentations include but are not limited to: physician letter, court letter, and service orders. The documentation must be postmarked within ten (10) business days of the exam date.

**Exam Administration**

**TESTING FORMAT**

The EOI exam is in multiple choice format. The exam includes 100 questions and candidates are provided two (2) hours or 120 minutes to complete the exam. Candidates must receive a score or 80% or higher to pass the exam.

Exam proctors will adhere to the time limit set for the EOI examination. If an accommodation for additional time has been requested and approved, proctors will adhere to the time limit set in the approved accommodation.

**SECURITY AT TEST ADMINISTRATION SITES**

All candidates must have their identification verified with a valid and current government-issued photo-ID before beginning their exam. Proctors are required to verify the candidate's identity as a condition of candidate admittance to the exam. Candidates must present a government-issued ID, such as a driver's license or passport, which should include a current photograph, the candidate's signature, and a permanent address. After the exam, proctors are required to return the results to MTCA, which indicates that all identifications were verified according to policy.

## EXAM CONDUCT

MTCA does not tolerate cheating or any breach of academic or professional ethics. MTCA also does not tolerate activity or conduct that jeopardizes the security or integrity of its certification exams. Accordingly, all candidates are required to:

1. Abide by the Testing Rules of Conduct described below.
2. Provide accurate and truthful information when they register.
3. Adhere to the MTCA Professional Code of Ethics, which is provided in the "Suspension or Revocation of Credentials (Disciplinary Action) section of this Handbook.

Failure to do so is considered misconduct for which the candidate may be disciplined.

## TESTING RULES OF CONDUCT (LIVE REMOTE PROCTORING)

Each candidate completing their exam via Live Remote Proctoring must abide by the following MTCA Testing Rules of Conduct:

- All exams must be completed within a single, continuous session. Candidates may not stop their exam administration and return to review their answers or continue the exam(s) at a later date or time. There will be no breaks permitted. If you leave the testing space during your 2-hour exam, you will forfeit your exam attempt.
- You are required to be in a private testing space. There cannot be any other people in the testing space at any time, including children.
- Your testing space must be clear and free of any items, including but not limited to: mobile devices, electronic tablets, electronic readers, cameras, MP3 players, pagers, radios, watches, electronic translators, calculators, and all other electronic devices. The only devices allowed are the computer, which you will be using for the examination, and the cell phone, which you will be using for proctoring via cell phone webcam technology.
- No reference books are allowed during any MTCA examination administration. Such material or any other papers may not be brought into the testing space.
- You will be required to be on-camera with a live remote proctor for the full duration of your exam.
- No smoking, eating, or drinking will be allowed during the examination.
- The proctor will not answer any questions pertaining to the examination content.
- Copying or communicating examination content is a violation of security policy. Either one may result in the disqualification of examination results and may lead to legal action.
- During the examination, you are considered to be a professional and shall be treated as such. In turn, you must conduct yourself in a professional manner at all times. You shall not use words or take actions that are vulgar, obscene, libelous, or that would denigrate the staff or other candidates.

## DISCIPLINARY ACTIONS FOR EXAM MISCONDUCT

Action taken against candidates who create disturbances or conduct themselves in a manner that may jeopardize the security of an exam or the comfort of other candidates may include removal from the certification program.

Misconduct includes the following behaviors:

- Using unauthorized materials in the testing room
- Taking an exam for someone else
- Causing disruptions of any kind

- Attempting to remove exam questions or responses from the testing room
- Tampering with computer hardware or software

### **SUSPICION OF MISCONDUCT DURING EXAM**

If the proctor is unable to verify the identity of the person appearing to sit for the EOI exam, the proctor must deny access to the examination. Under most circumstances, the candidate will be able to purchase a retest. MTCA reserves the right to determine whether the candidate is eligible to take the exam at a future date in cases of misrepresentation, fraud, or other circumstances indicating attempting cheating or exam content theft.

Proctors are permitted, on behalf of MTCA, to enforce the Testing Rules of Conduct for all exams. If a candidate violates any of the rules, the proctor can terminate the exam and remove the candidate from the examination. The proctor will file a report with MTCA, and MTCA will determine if any further disciplinary action is warranted. No refund will be provided.

### **VIOLATION OF TESTING RULES OF CONDUCT**

Any allegations concerning the security of the exam and MTCA's intellectual property, and cheating will be investigated. MTCA has the right to invalidate test scores, suspend or revoke certification credentials, and deem a candidate ineligible to retake the exam.

MTCA reserves the right to report violations of the rules to concerned third parties, which may include the candidate's school or employer, any regulatory or licensing body, or law enforcement.

## **Exam Results**

### **SCORING**

Certification exams are scored immediately upon completion by computer-based testing software. Candidates are given a preliminary result indicating whether or not they have passed. Candidates may use this preliminary report to provide evidence to employers of a passing score. Accordingly, please note that although scores may be released immediately, all data subsequently will be analyzed for anomalies. If anomalies are found that impact the scoring, the exam will be rescored, and the candidate will be advised if the rescore impacts whether he/she passed or failed the exam. In some cases, an anomaly will be determined to be the result of an administrative error or, possibly, misconduct. MTCA reserves the right to require candidates to retake exams when an administrative error occurs that impacts exam scores or if it determines that misconduct by others may have impacted the scores of all examinees. Individuals involved in misconduct are subject to disciplinary action such as revocation of the ability to take the exam.

MTCA examinations are scored using a scaled score method. Scaled scores can range from 0 to 100 and represent a conversion of the candidate's raw score to allow for comparison between different forms of the same examination. The use of a scaled score provides consistency in reporting passing standards by accounting for the difficulty level of the examination form. The same level of performance is required to meet the scaled passing score (cut score) of 80 regardless of which form of the exam a candidate takes. A candidate must achieve a scaled score (cut score) of 80 or higher to pass the examination covered in this Handbook.

### **DISCLOSURE OF SCORES TO THIRD PARTIES**

Although MTCA may share successful exam results (a pass without a score) with third parties, MTCA does not disclose exam scores or failed attempts to others unless required by law to provide results to regulating agencies, the candidate is being sponsored by a company or health club, or if permission has been granted by the candidate.

Candidates who, after verification, pass the exam will receive a formal certificate indicating that they are a certified professional. The certificate is sent electronically. Hard copies of the certificate may be purchased by contacting [info@mapletreecanceralliance.org](mailto:info@mapletreecanceralliance.org). Instructions for the purchase of the hard copy will be included in the email with your electronic certificate. Certificates may also be found using the "Search Trainers" function on the MTCA website.



## **UNSUCCESSFUL EXAM ATTEMPTS**

Candidates may take the exam up to four times in a 12-month period. If a passing score is not achieved in four exam attempts in 12 months, the candidate must wait 12 months after the fourth attempt to retake the exam. Candidates do not need to resubmit eligibility documentation unless their CPR/AED certification has lapsed. All candidates begin with zero attempts. Please see the “Exam Retest” section for more information.

## **EXAM APPEALS**

Candidates may request an appeal of their final exam score. Requests must be received in writing on the official MTCA Appeals Form, which can be found at: [www.mapletreecanceralliance.org/get-certified/forms](http://www.mapletreecanceralliance.org/get-certified/forms) within thirty (30) days of the examination date. Decisions will be communicated in writing only. All decisions made by the Certification Board are final. For more information about the appeals process, please see the Appeals section of this Handbook.

## **EXAM RETEST**

Candidates who do not have proper documentation, or do not pass the certification exam on the first attempt and wish to retake the exam will be allowed to retest after a one-week waiting period. If the candidate is unsuccessful after the second attempt, he/she will be required to wait thirty (30) days between subsequent exam attempts. Exam retakes must be taken within sixty (60) days of exam purchase. The EOI exam may not be taken more than four (4) times in 12 months. If the candidate does not pass the exam on the fourth try, they must wait 12 months after the fourth attempt to retake the exam. Eligibility to retake an exam, under extraordinary circumstances, can be reviewed by the Disciplinary and Appeals Committee. Please see the Appeals section of this Candidate Handbook for more information.

Retest requests are made using the MTCA EOI Exam Retest Request Form found at [www.mapletreecanceralliance.org/get-certified/resources](http://www.mapletreecanceralliance.org/get-certified/resources) and submitted to [info@mapletreecanceralliance.org](mailto:info@mapletreecanceralliance.org).

## **Certification Credentials**

### **AWARDING OF CREDENTIAL**

Only candidates who achieve a passing score on the exam will be allowed to use the certification program credential. MTCA will issue an official certificate to individuals who earn their certification. Certifications are valid for three (3) years and expire on the date provided on the certificate.

### **RECEPTION OF CERTIFICATION**

You should expect to receive your certification electronically, if you have met all examination requirements, within ten (10) days of your examination date. You will receive notification of your official results and your certificate by email. If for some reason you have not received your official score or certification within thirty (30) days, please contact [info@mapletreecanceralliance.org](mailto:info@mapletreecanceralliance.org) by email to inquire about your results.

### **CREDENTIAL USE**

Candidates who achieve a passing score on the exam and have a current valid credential are allowed to include the certification credential “MTCA EOI” behind their name and the title “MTCA Certified Exercise Oncology Instructor”. The use of the certification credential should always be in a context and using media consistent with demonstrating professional credentialing, including but not limited to: office signage, resumes, websites, business cards, presentations, introductions, and electronic signatures. MTCA credentials may not be used to endorse any product, service, or company, or as a company, product, or brand name.

### **WHISTLEBLOWER ASSURANCE**

If an individual is aware of a fitness professional using the MTCA EOI credential but that individual is not listed as an active and NCCA Accredited Fitness Professional on the MTCA website, they may contact MTCA CB to report the individual. The MTCA CB assures the “whistleblower” will have complete anonymity and will follow up on said complaint.

## UPDATING YOUR CONTACT INFORMATION

As noted in the Getting Started section of this Handbook, it is important that MTCA always have your current name and contact information. It is important that you advise MTCA of changes to your name, address, and other contact information as soon as possible but at the very least before undertaking the recertification process. If your name has changed and you wish to have your new certificate to match your current name, MTCA will need to update your records. Additionally, the name on the CPR/AED card submitted with your recertification application will need to match the most current name in MTCA's records.

## Recertification

### RECERTIFICATION AND CONTINUED COMPETENCE

The EOI Certification is valid for three years after the date of passing the exam, after which the certificant will need to recertify or retake and pass the certification exam. To qualify for recertification, they will need to earn 10 Continuing Education Credits (CECs) and hold a current CPR/AED certification. The purpose of recertification is to assure that certified professionals holding MTCA credentials remain current with best practices and maintain competence in the field of exercise oncology.

MTCA audits a percentage of randomly selected recertification/renewal forms each year. If audited, they will need to provide documentation of their CECs to the MTCA National Director of Certification within thirty (30) days. If they are unable to do so, their certification will be considered "inactive", and they will have one year to complete the recertification process by providing the documentation or by obtaining new CECs.

The MTCA Continuing Education Subcommittee reviews the validity of all audit paperwork. If the paperwork is complete and they've earned the appropriate number of CECs, they will be notified that the credential is valid until the next recertification due date.

Continued Competence is defined as "demonstrating specified levels of knowledge, skills or ability not only at the time of initial certification, but throughout an individual's professional career." This ensures that the services provided by the certificant are always delivered at the highest quality and safest level. The certificant's clients have an expectation that their fitness professional is not only working within their designated scope of practice but using the best current practices within the fitness industry. Continued competence ensures this.

### RATIONALE FOR RECERTIFICATION

The inclusion of recertification requirements in the EOI certification program is a crucial element aimed at ensuring the ongoing competence, currency of knowledge, and commitment to ethical practice among certified professionals in the field of exercise oncology. The rationale for implementing recertification is rooted in several key principles and considerations:

#### ***1. Dynamic Field of Exercise Oncology:***

The field of exercise oncology is dynamic and continually evolving. New research findings, treatment modalities, and exercise interventions emerge regularly. As such, it is imperative for EOs to stay updated with the latest evidence-based practices to provide the best care to cancer patients and survivors. Recertification ensures that professionals remain current with advancements in the field.

#### ***2. Quality Assurance:***

Ensuring the highest standards of care for cancer patients is of paramount importance. Recertification serves as a mechanism to maintain the quality of care provided by EOs. By periodically assessing and verifying their knowledge, skills, and ethical practice, we can be confident that certified professionals are equipped to offer safe and effective exercise programs that align with current best practices.

#### ***3. Demonstration of Commitment:***

Recertification requirements demonstrate the commitment of certified EOs to their profession and their dedication to providing the best possible care to their clients. By actively participating in the recertification process, individuals reaffirm their commitment to ethical conduct, ongoing learning, and maintaining their professional competence.

#### ***4. Patient Safety and Well-being:***

Cancer patients and survivors often face unique health challenges, and exercise can play a pivotal role in their recovery and overall well-being. Ensuring that certified EOs possess up-to-date knowledge and skills minimizes the risk of harm to patients and maximizes the benefits they receive from exercise interventions.

### **5. Credential Credibility:**

A certification program that includes recertification requirements enhances the credibility of the credential itself. Employers, healthcare organizations, and the public can have greater confidence in the capabilities of certified EOs when they know that the credential is continually renewed based on rigorous standards.

### **6. Ethical Considerations:**

Ethical practice is fundamental in healthcare professions, and recertification underscores the importance of ethical conduct and adherence to professional standards. It serves as a reminder to certified professionals of their ethical obligations to clients, colleagues, and the profession as a whole.

Incorporating recertification into the EOI certification program aligns with the overarching goals of promoting patient safety, maintaining high standards of care, and upholding the credibility and integrity of the certification. It is a proactive step that acknowledges the ever-changing nature of the field while ensuring that certified professionals continue to provide the best possible care to individuals affected by cancer. Recertification is a means to safeguard the well-being of patients and to honor the commitment of EOs to their profession and the individuals they serve.

## **RECERTIFICATION REQUIREMENTS**

A certification is valid for three (3) years following the issuance date of the certification. To recertify, you must complete continuing education, complete the recertification application, and pay the recertification fee, as follows:

**Continuing Education:** Certified professionals must complete 10 CEC, the equivalent of 10 contact hours of training, every three years.

1. MTCA offers a one time, ninety (90) day grace period with an extension fee. This extension allows the certified professional 90 days beyond the expiration date to complete the 10 CECs.
2. CECs earned after the 90-day grace period will not count toward recertification. If a certified professional has not completed all the required CECs before the end of the 90-day grace period, they will be required to retake the certification examination to maintain their credentials.
3. The "Recertification Period" is the three-year period before your current certification expires plus, if you pay the Extension Fee, an additional 90 days.
4. CECs can be obtained from MTCA-approved continuing education providers. Continuing education opportunities can be found on the MTCA website under the "My Education" tab, at [www.mapletreecanceralliance.org](http://www.mapletreecanceralliance.org). The cost, length, and CECs awarded for continuing education courses vary, so you should carefully review the information available about each course before enrolling.

The MTCA Provider Program allows outside organizations to submit their course content to be considered for review and approval of CECs. Once approved, these courses will be designated as MTCA approved offerings and will meet the approved requirements.

If there is a continuing education course that has not yet been approved by the Certification Board, you must submit a CEC Approval Request Form and associated fees. As with all MTCA-approved CECs, MTCA will evaluate the course to ensure that it (a) promotes continued competence, develops knowledge and skills, and enhances professional skills and judgment beyond that required for entry-level practice and (b) that the number of awarded CECs is appropriate. MTCA reserves the right to withhold approval of a submitted course or to limit the number of CECs awarded. Until the course is approved by MTCA, it cannot be used towards recertification so you should be sure to submit the course well in advance of the end of the Recertification Period.

All recertification applications must demonstrate the applicant has a valid and current CPR/AED certification (live, hands-on training required). Please note that the name on the CPR/AED card submitted with your recertification application will need to match the most current name in MTCA's records. You will NOT receive CECs for obtaining a current CPR/AED certification because this is a requirement for the certification. Excess CECs earned in one Recertification Period cannot be applied to the next Recertification Period.

**Recertification Application:** With each recertification, you will need to follow the online recertification application process and complete the Recertification Application Packet. You will be required to provide documentation verifying the completion of 10 CECs. You are responsible for obtaining a certificate of completion or other official document from each continuing education course you attended, this includes the front and back of your mandatory CPR/AED certification (live, hands-on course). There are random audits performed on recertification applications submitted. If your application is chosen for audit and you do not meet the requirement, you will have 30 days to submit all supporting documentation to the MTCA Recertification Department.

**Recertification Fees:** A fee must be paid with each recertification application (the "Recertification Fee"). If you timely recertify before the expiration date on your certificate, you will be charged the Recertification Fee (see website for current fee amount). If you use the 90-day extension period to complete your CEC requirements, you will be required to pay the normal Recertification Fee, plus an additional "Extension Fee". All fees, including the Recertification Fee and the Extension Fee, are subject to change and you should reference the MTCA website to confirm the current fee structure. Only one (1), ninety (90) day extension may be granted. CEC costs are separate and apart from the recertification fees and are paid at the time of purchase of each continuing education course.

## RESTORING CERTIFICATION

Should a certification expire, you may restore your certification after the three (3)-month extension period, but within one (1) year of the expiration date. To restore your certification, you must submit:

- Evidence of 10 continuing education credits (the credits must have been earned prior to the original expiration date or within the ninety (90)-day extension period).
- A copy of the front and back of your CPR/AED certification card that shows the certification was continuously current from the original certification period.
- Payment of applicable fees, including the Recertification Fee, Recertification Extension Fee, and the Recertification Restoration Fee.

You may not restore your certification after the one-year anniversary date of the expiration date or if the above-listed requirements cannot be satisfied. Under such circumstances, you must register and successfully retake the examination to become certified. You are not permitted to use the MTCA-EOI credential following your name or on office signage, your resumes, any websites, your business cards, presentations you give, introductions, or electronic signatures if you have let your certification lapse.

## Suspension or Revocation of Credentials (Disciplinary Action)

MTCA reserves the right to reprimand a certified professional or suspend or revoke their credentials for violating the MTCA Professional Code of Ethics (described in this Handbook), engaging in unprofessional conduct as described below.

## MTCA'S PROFESSIONAL CODE OF ETHICS

MTCA has established a code of ethics and guidelines to protect the public and the profession. Candidates are expected and certified professionals are required to agree to and follow the MTCA Professional Code of Ethics, stated below.

**Professionalism.** Each certified professional must provide optimal professional service and demonstrate excellent client care in their practice. Each certified professional must:

- Abide fully by MTCA Professional Code of Ethics
- Conduct oneself in a manner that merits the respect of the public, other industry colleagues, MTCA, and its employees and management staff
- Treat each client and industry professionals inside and outside the industry with respect and dignity all the time
- Maintain the confidentiality and privacy of patients or other colleagues by not sharing conversations had with them
- Use appropriate professional communication in all verbal, non-verbal, and written transactions. This includes contact with patients while training. Be sure to inform and get verbal approval from all patients in every situation before touching them in any place on their body
- Provide and maintain an environment that ensures patient safety at all times, every session, with focus on the client during the training session
- Be on time for every session with a patient, including non-paid assessments and consultations while maintaining proper hygiene
- Refrain from cellular phone usage during any training session
- Train only low risk patients or those who are cleared of medical concerns by a registered medical professional
- Always stay focused on the patient you are training and never lean on equipment or watch television during a session with a patient
- Refer the patient to the appropriate medical practitioner when, at a minimum, the certified professional:
  - Becomes aware of any change in the patient's health status or medication
  - Becomes aware of an undiagnosed illness, injury, or risk factor
  - Becomes aware of any unusual patient pain and/or discomfort during the course of the training session that warrants professional care, in which case the certified professional will immediately discontinue the session.
- Refer the patient to other healthcare professionals when nutritional and supplemental advice is requested unless the certified professional has been specifically trained to do so or holds a credential to do so and is acting in that capacity at that time
- Maintain proper professional hygiene (clothing and physical appearance) all the time when present in the workplace
- Treat every member, patient, and colleague as well or better than you would want to be treated
- Remain in good standing and maintain current certification status by acquiring all necessary continuing education requirements.

**Confidentiality.** Each certified professional must respect the confidentiality of all patient information. In their professional role, the certified professional must:

1. Protect the patient's confidentiality in conversations, advertisement and any other arena unless otherwise agreed upon by the client in writing or, when necessary due to a medical occurrence or when legally required;

2. Protect the interest of patients who are minors by law or unable to give voluntary consent by securing the legal permission of the appropriate third party or guardian; and
3. Store and dispose of patient records in a secure manner.

**Legal and Ethical.** Each certified professional must comply with all legal requirements within the applicable jurisdiction. In their professional role, the certified professional must:

1. Obey all local, state, federal, and provincial laws, regulations and professional rules;
2. Accept complete responsibility for their actions;
3. Maintain accurate and truthful records; and
4. Respect and uphold all existing copyright, trademark, and intellectual property right laws.

MTCA may revoke or otherwise take immediate action with the certification of an individual who is or has been convicted of, plead guilty to, or plead no contest to a felony or misdemeanor or has been found through legal process to have been negligent or responsible for injury or harm in performing in their professional capacity or have misrepresented their qualifications to provide services, including opinions or advice, to the public.

**Business Practice.** Each certified professional must practice with honesty, integrity, and lawfulness. In their professional role, the certified professional must:

1. Not default on any payments due to MTCA regarding the credential;
2. Maintain adequate liability insurance;
3. Maintain adequate and truthful progress notes for each client;
4. Accurately and truthfully inform the public of services rendered and his/her qualification to render such services;
5. Honestly and truthfully represent all professional qualifications and affiliations;
6. Advertise in a manner that is honest, dignified and representation of services that can be delivered without the use of provocative and/or sexual language and/or pictures;
7. Maintain accurate financial, contract, appointment, and tax records including original receipts for a minimum of four years; and
8. Comply with all local, state, federal, and providence laws and employer rules regarding harassment and discrimination, including sexual harassment.

**Unprofessional Conduct.** Certified professionals who hold MTCA credentials serve the public and are entrusted with the care, safety, and privacy of their clients. MTCA requires all certified professionals to behave professionally at all times and reserves the right to suspend or revoke credentials for any of the following reasons:

- Acts of dishonesty, misrepresentation, or fraud.
- Behavior that disregards the dignity, safety, or privacy of the client or anyone under the certified professional's fitness or training oversight.
- Unlawful activity, particularly such activity that jeopardizes the life, safety, or health of others or calls into question the certified professional's ability to practice as a competent fitness professional.



- Conduct that is discriminatory or harassing, including acts of sexual harassment.
- Denial or revocation of licensure, registration, or approval by a state board or agency or membership organization with oversight responsibilities for the profession on grounds of gross misconduct, gross negligence of duties, misrepresentation, or fraud.
- Unauthorized use of MTCA's proprietary content or materials or any infringement activities with regards to any of MTCA's intellectual property rights, including its copyrighted materials, its trademarks, its trade names, including those of any of its products, whether in long name, short name or acronym form, its logos, its trade dress or its science.
- Material misrepresentation or fraud in any statement to MTCA, including, but not limited to, statements made to assist oneself or another candidate or certified professional to apply for, obtain, or retain certification or in applying for, entering into obligation, or failing to meet the obligations of a payment plan with MTCA.
- Violation of the Testing Rules of Conduct, even if not discovered until after the issuance of MTCA certification credentials.

MTCA reserves the right to discipline a certified professional who engages in illegal, threatening, or unprofessional behavior or activity not specifically described above. MTCA also reserves the right to report disciplinary actions to concerned third parties, including employers, inquiring customers of the certified professional, school, any regulatory or licensing body or law enforcement.

#### **DISCIPLINARY POLICY**

The following procedures allow individuals to bring complaints concerning the conduct of individuals who are candidates, registrants, or certificants of MTCA.

In the event an individual candidate, registrant, or certificant violates the Code of Ethics for MTCA Certified Professionals, certification rules, or MTCA policies they may reprimand or suspend the individual or may revoke certification.

The grounds for sanctions under these procedures may include, but are not limited to:

1. Violation of the Code of Ethics for MTCA Certified Professionals.
2. Violation of established MTCA policies, rules, and requirements.
3. Conviction of a felony or other crime of moral turpitude under federal or state law in a matter related to the practice of, or qualifications for, employment support services.
4. Gross negligence, willful misconduct, or other unethical conduct in the performance of services for which the individual has achieved certification from MTCA.
5. Fraud or misrepresentation in an initial application or renewal application for certification.
6. Irregular behavior that undermines or threatens the integrity of the application, assessment, or certification processes of MTCA.

Information regarding the complaint process is available to the public via the MTCA website or other published documents. A complete copy of this policy will be made available to any individual upon request.

Actions taken under this policy do not constitute enforcement of the law, although referral to appropriate federal, state, or local government agencies may be made about the conduct of the candidate or certificant in appropriate situations. Individuals initially bringing complaints are not entitled to any relief or damages by virtue of this process, although they will receive notice of the actions taken.

## COMPLAINTS POLICY

For each complaint that the Chair concludes is a valid and actionable complaint, MTCA authorizes an investigation into its specific facts or circumstances to whatever extent is necessary in order to clarify, expand, or corroborate the information provided by the submitter.

The Chair notifies the MTCA Ethics Subcommittee to investigate and make an appropriate determination with respect to each valid and actionable complaint; the MTCA Ethics Subcommittee may review one or more such complaints as determined by the Chair. The MTCA Ethics Subcommittee initially determines whether it is appropriate to review the complaint under these Procedures or whether the matter should be referred to another entity engaged in the administration of law. The timeline for responses and for providing any additional information shall be established by the MTCA Ethics Subcommittee. The review and investigation will be completed in an appropriate amount of time, not to exceed six months, unless there are extenuating circumstances that require an extended time period. The MTCA Ethics Subcommittee may be assisted in the conduct of its investigation by other members of MTCA staff, or legal counsel. The Chair exercises general supervision over all investigations.

Both the individual submitting the complaint and the candidate/certificant who is the subject of the investigation (or their employer) may be contacted for additional information with respect to the complaint. The MTCA Ethics Subcommittee, MTCA staff on its behalf, may at its discretion contact such other individuals who may have knowledge of the facts and circumstances surrounding the complaint.

All investigations and deliberations of the MTCA Ethics Subcommittee and MTCA are conducted in confidence, with all written communications sealed and marked "Personal and Confidential," and they are conducted objectively, without any indication of prejudice. An investigation may be directed toward any aspect of a complaint which is relevant or potentially relevant. Formal hearings are not held, and the parties are not expected to be represented by counsel, although the MTCA Ethics Subcommittee and MTCA may consult their own counsel.

## DUE PROCESS

Due process is afforded to any individual involved in misconduct, violation of the MTCA Professional Code of Ethics, or other prohibited activity described in the Disciplinary Policy section above.

1. Determining the existence of a possible violation;
2. Investigating the suspected violation;
3. Communicating the findings and sanctions imposed, if any, to the affected parties.

If a proctor, candidate, consumer, or other party has a complaint, they can fill out the Conduct Violation Report form, found at [www.mapletreecanceralliance.org/get-certified/resources](http://www.mapletreecanceralliance.org/get-certified/resources). The charged person will be notified of the complaint by traceable mail, such as registered mail or Federal Express. Where MTCA deems it to be appropriate, to protect the person who made the complaint from retaliatory action, MTCA reserves the right to withhold such person's name.

A written response concerning the complaint will be considered if submitted within ten (10) days following the delivery of the complaint to the accused individual. The complaint and response, if any, will be reviewed by the Executive Committee.

Upon completion of its investigation of the report conducted, including the written response and any materials provided by the accused individual, MTCA will make determination and, if appropriate, impose disciplinary action. If the Executive Committee has considered substantially similar case(s) in the past, their decision in those prior cases will be considered precedent for future cases and MTCA staff will apply the prior decision where appropriate. Under those circumstances, MTCA staff will send a decision letter that is consistent with the Committee's earlier decisions. If the Committee has not considered substantially similar cases and there is no determinative precedent, the request and supporting evidence will be reviewed by the Committee.

Upon review of the complaint and the evidence, the MTCA CB Executive Committee will determine if a further investigation is warranted. Based on its review of the gathered information, including the written response and any materials provided by the

accused individual and after deliberations, the Committee will take a vote. Upon an affirmative vote of two-thirds of the Committee, this Committee shall determine whether any disciplinary action already taken by MTCA needs to be revised or enhanced and, in cases where disciplinary action has been taken, whether grounds for additional disciplinary action exists and, if so, what additional disciplinary action should be taken. The Committee shall notify the charged candidate or certified professional of their decision within thirty (30) business days. All decisions of the MTCA CB are final.

## **APPEALS**

As described above in the Due Process Section, the first recourse for a disciplined candidate or certified professional who disagrees with the findings leading to disciplinary action or the imposed action itself, can file a request for appeal with the Executive Committee. The request for reconsideration must be submitted in writing to the MTCA National Director of Certification. The request must demonstrate equivalence to the current eligibility requirements. The National Director of Certification will review the request within ten (10) days. If the issue can be resolved at the staff level, the National Director of Certification will decide and notify MTCA of the result. If an exam eligibility is rejected by the National Director of Certification, the candidate may request an eligibility review by the MTCA Executive Committee. Within thirty (30) days, MTCA Executive Committee will appoint a Reconsideration Committee to review the request. The committee will review the request and provide a recommendation to the MTCA Executive Committee within forty-five (45) days. The decision made by the MTCA Executive Committee will be final. The candidate will be notified within fifteen (15) days of the MTCA Executive Committees decision.

## **Exception Requests**

As noted in the “Eligibility” and “Recertification” sections of this Candidate Handbook, candidates must meet certain requirements to be eligible to sit for a certification exam or to obtain recertification. Candidates seeking exceptions to these requirements may do so as described below.

### **ELIGIBILITY EXCEPTION REQUESTS**

Candidates may request an exception to attestation and eligibility requirements to sit for the certification exam by completing the appropriate Exceptions Request/Appeals Form. MTCA reserves the right to uphold eligibility requirements as established by the Certification Board. Decisions concerning exception requests will be communicated in writing only. Candidates may appeal the exception request decision to the appropriate Board. The Board will review the appeal at their next scheduled board meeting. Decisions of the Board are final.

### **CONFIDENTIALITY POLICY**

Examination scores are confidential and will not be disclosed unless specific written permission to do so is provided by the candidate prior to the exam, a specific written request to do so is received by the candidate after completion of the exam, or by subpoena or court order. Candidates must also indicate in writing the specific person or organization to whom the scores should be disclosed. MTCA verifies, upon request, the status of all individuals that have passed their respective examination and maintain their current certification status. MTCA allows all currently certified individuals to make their contact information available to public searches.

### **CONFIDENTIALITY/NON-DISCLOSURE AGREEMENTS**

Prior to starting the exam, candidates will be asked to agree with the terms described in both the MTCA non-disclosure agreement (NDA), and the Code of Ethics for MTCA Certified Professionals. Candidates who do not accept the terms of these statements will not be allowed to proceed with the exam.

All staff, certification board members, proctors, examiners, consultants and vendors, SMEs, applicants, and certificants are required to sign the MTCA non-disclosure agreement. MTCA will enforce these agreements to protect the confidentiality of current and prospective candidates.

### **RECERTIFICATION EXCEPTION REQUESTS**

Certified professionals may request an exception to the Requirements for recertification by completing the appropriate Exceptions Request/Appeals Form. MTCA reserves the right to uphold recertification requirements as established by the

applicable Certification Board. Decisions concerning exception requests will be communicated in writing only. Certified professionals may appeal the exception request decision to the Board. The Board will review the appeal at their next scheduled appropriate Board meeting. Decisions of the Board are final.

### **PRECEDENT-BASED EXCEPTION**

Candidates/certified members may appeal a precedent-based determination, as described in the Due Process section above, to the Certification Board within thirty (30) days of receiving the decision letter. The Board will hear the appeal at the next scheduled meeting. Decisions of the Board are final.

Please send all Appeals to:  
MTCA Certification Board  
425 N Findlay St  
Dayton, OH 45404

Email: [certificationboard@mapletreecanceralliance.org](mailto:certificationboard@mapletreecanceralliance.org)

Website: [www.mapletreecanceralliance.org/get-certified/certification-board](http://www.mapletreecanceralliance.org/get-certified/certification-board)

## **Procedures for Test Construction**

### **PROCESS FOR DEVELOPMENT OF ITEMS**

Developing items for the Exercise Oncology Instructor (EOI) certification exam requires attention to detail and adherence to best practices to ensure accuracy, currency, fairness, and appropriateness for creating exercises for individuals diagnosed with, and being treated for, cancer.

The systematic process by which the EOI certification exam was developed included the following steps:

1. **Establish an Item Development Committee:** A diverse committee of subject matter experts (SMEs) in exercise oncology was assembled. Included in this group were certified EOIs, healthcare professionals, researchers, and psychometricians.
2. **Conduct a Job Task Analysis (JTA):** A comprehensive JTA was then conducted to identify the critical tasks and competencies essential to an EOI. The JTA informs the content blueprint for the exam.
3. **Develop Item Specifications:** Based on the JTA, the SMEs create item specifications that outline the content domains, weightings, and cognitive levels to be assessed in the EOI certification exam.
4. **Item Writing:** Bloom's Taxonomy is utilized to guide item development for the EOI certification exam, ensuring that items assess a range of cognitive skills, including knowledge recall, comprehension, application, and analysis. From here, a pool of potential items, including multiple-choice questions, case studies, and practical scenarios, are created, to ensure diversity in item types.
5. **Review and Validation:** Next, a thorough review of items by SMEs is conducted to assess accuracy, relevance, and clarity. Items are validated by pilot testing them with a diverse group of candidates to identify potential issues with item difficulty, discrimination, and fairness.
6. **Item Revision:** Based on feedback and results from the validation process, items are revised to ensure that items are clear, free from ambiguity, and accurately reflect current evidence-based practice in exercise oncology.
7. **Assemble the Exam Form:** Next, multiple exam forms are created from the validated item pool to prevent cheating and ensure security, as well as to ensure that the content of each form is balanced according to the content blueprint.
8. **Standard Setting:** Next, a standard-setting process is implemented to establish passing scores based on expert judgment or statistical methods, ensuring that the passing criteria are valid and fair.

9. **Accessibility Considerations:** Along with exam development, it is vital to ensure that exam items are accessible to individuals with disabilities, providing accommodations as necessary to ensure fair testing conditions.
10. **Ongoing Review and Maintenance:** The CB has established a schedule for regular item review and maintenance to keep the exam content current and aligned with evolving practices in exercise oncology.
11. **Continuous Quality Assurance:** Along with ongoing review and maintenance of the EOI certification exam, the CB also implements quality assurance measures throughout the item development process, including ongoing training for item writers and reviewers. They also monitor and evaluate exam performance and conduct statistical analyses to identify and address any issues with item performance.
12. **Candidate Feedback:** Finally, candidate feedback on exam items and content is collected and analyzed to make continuous improvements to the certification exam.

By following this systematic process, the MTCA CB has developed a robust EOI certification exam that accurately assesses candidates' knowledge and skills, maintains currency with evolving practices, and ensures fairness for all candidates.

### PROCESS FOR DEVELOPMENT OF FORMS

Creating multiple examination forms for the EOI certification exam is essential to ensure fairness, comparability, and content integrity. The systematic process the MTCA CB uses for achieving this includes the following steps:

1. **Content Blueprint Development:** Exam development begins by developing a comprehensive content blueprint that outlines the percentage of questions to be allocated to each content domain or topic area. This blueprint serves as a guide for item selection and distribution.
2. **Item Pool Generation:** From here, a pool of exam items is developed, which aligns with the content blueprint. These items can include multiple-choice questions, case studies, practical scenarios, and other item types.
3. **Item Review and Validation:** Next, the SME panel meets to review and validate the items. Together, they ensure that the items are clear, relevant, and accurately assess the desired knowledge and skills for the EOI certification.
4. **Item Categorization:** The validated items are categorized according to content domains and topic areas specified in the content blueprint. This categorization facilitates the creation of multiple exam forms with balanced content coverage.
5. **Exam Form Blueprint:** Next, an exam form blueprint that specifies the number of items needed for each content domain or topic area in the exam forms is developed. This blueprint must adhere to the content blueprint.
6. **Randomized Item Selection:** A randomized process is conducted to select items from the categorized pool, based on the exam form blueprint. This ensures that each exam form has a unique set of items while maintaining content balance.
7. **Quality Control:** A quality control review of each exam form is conducted to verify that it adheres to the exam form blueprint and content blueprint. In this step, it is necessary to ensure that the difficulty levels of items are consistent across all exam forms.
8. **Beta Testing:** Next, beta tests of the multiple exam forms are administered to a representative group of candidates. Candidate performance and statistical analyses are conducted to identify and address any potential issues with item performance or form comparability.
9. **Equating and Scaling:** Equating and scaling methods are applied to ensure that scores from different exam forms are comparable and have the same meaning in terms of candidate performance.
10. **Standard Setting:** A standard-setting process is established to determine the passing score for each exam form. In this step it is vital to ensure that passing criteria are consistent and fair across forms.

11. **Regular Updates:** A schedule for regular updates and reviews of exam forms is implemented to keep content current and aligned with evolving practices in exercise oncology.
12. **Security Measures:** Implement rigorous security measures to protect the integrity of exam forms, ensuring that they are secure and confidential throughout the development process.
13. **Accessibility Considerations:** The MTCA CB ensures that each exam form is accessible to individuals with disabilities by providing necessary accommodations and adhering to our accessibility standards.
14. **Candidate Feedback:** Candidates are encouraged to provide feedback on the exam forms, and this feedback is used to make continuous improvements to the EOI certification exam.

## UPDATING ITEM CLASSIFICATIONS

Updating item classifications on the EOI certification exam is essential to ensure that the content remains relevant, accurate, and aligned with current best practices in the field. The ongoing review and update of item classifications occurs as follows:

1. **Item Review Committee:** The SMEs oversee the item classification update process.
2. **Review Exam Blueprints and Objectives:** Exam blueprints and objectives are reviewed to ensure they align with the latest developments in exercise oncology and the changing needs of the certification program.
3. **Content Review:** The current item classifications and categorizations within the EOI certification exam are reviewed to identify areas that may require updates. Particular attention is given to content domains that have evolved or gained prominence in the field of exercise oncology.
4. **Emerging Topics Identified:** The MTCA CB stays informed about emerging trends, research findings, and best practices in exercise oncology by regularly consulting relevant literature, professional associations, and experts in the field.
5. **Gather Input from SMEs:** SMEs are engaged to provide input and recommendations on the potential inclusion of new content domains.
6. **Conduct a Gap Analysis:** Potential gaps in the current exam content are identified by comparing content to the latest research, guidelines, and best practices in exercise oncology.
7. **Develop Updated Content Blueprint:** Based on the input from SMEs, the content review, and gap analysis, an updated content blueprint is developed, outlining changes or additions to content domains and item classifications.
8. **Update Item Bank:** Item bank is updated to reflect changes in content domains and classifications. New items are aligned with the updated content blueprint.
9. **Review Item Quality:** A thorough review of the newly created or revised items is conducted to ensure they meet the same high standards of quality, clarity, and relevance as existing items.
10. **Conduct Beta Testing:** The updated exam forms are administered to a representative group of candidates during beta testing. Candidate performance and item statistics are analyzed to evaluate the effectiveness of the changes.
11. **Standard Setting:** The results of the beta testing are analyzed to adjust passing scores and ensure that the updated items are appropriately calibrated.
12. **Documentation:** All changes made to item classifications, including the rationale for reclassifications or additions, as well as the results of the beta testing and standard setting processes, are documented.
13. **Ongoing Review Cycle:** A schedule for regular review and update cycles is created, ensuring that the exam content remains aligned with the evolving field of exercise oncology.



14. **Accessibility Considerations:** Updated items and classifications are made accessible to individuals with disabilities, providing necessary accommodations as needed.
15. **Candidate Feedback:** Candidates are encouraged to provide feedback on the updated exam content and classifications, and this feedback is used to inform future updates and improvements.

## PROCEDURES FOR SCORING

Certification exams are scored immediately upon completion by web-based testing software. Candidates are given a preliminary result after completion of the exam indicating whether or not they passed. Although the scores are not made official until verified by MTCA and any proctor or exam incident reports have been reviewed (within approximately two weeks after the exam date), candidates may use this preliminary report to provide evidence to employers of a passing score.

Accordingly, please note that although scores may be released immediately, all data subsequently will be analyzed for anomalies. If anomalies are found that impact the scoring, the exam will be rescored and the candidate will be advised if the rescore impacts whether he/she passed or failed the exam. In some cases, an anomaly will be determined to be the result of an administrative error or, possibly, misconduct. MTCA reserves the right to require candidates to retake exams when an administrative error occurs that impacts exam scores or if it determines that misconduct by others may have impacted the scores of all examinees. Individuals involved in misconduct are subject to disciplinary action described.

MTCA examinations are scored using a scaled score method. Scaled scores can range from 0 to 100 and represent a conversion of the candidate's raw score to allow for comparison between different forms of the same examination. The use of a scaled score provides consistency in reporting passing standards by accounting for the difficulty level of the examination form. The same level of performance is required to meet the scaled passing score of 80 regardless of which form of the exam a candidate takes. A candidate must achieve a scaled score of 80 or higher in order to pass the examinations covered in this Handbook.

**Disclosure of Scores to Candidates.** Candidates who pass the exam will receive their overall score, along with a domain-level breakdown of results. Candidates who fail the exam are provided with their score along with a content breakdown to help focus the candidate's preparation for a retest. Exam scores are never provided over the phone.

**Disclosure of Scores to Third-Parties.** Although MTCA may share successful exam results (a pass without a score) with third parties, MTCA does not disclose exam scores or failed attempts to others unless required by law to provide results to regulating agencies, or if permission has been granted by the candidate.

Candidates who, after verification, pass the exam will receive a formal certificate indicating that they are a Certified Exercise Oncology Instructor. The certificate is sent by U.S. mail within four weeks following the date of the exam. Certificates may take longer to reach candidates who live outside of the United States. MTCA credentials can be verified by members of the general public on the MTCA website.

**Feedback to Candidates.** Upon completion of the exam, the candidate will immediately be provided domain-level exam results. For more information on the exam domains, see the "Procedures for Test Construction" section of this handbook. The domains each have a set number of questions assigned to them. When reviewing the domain-level scores, the candidate should review the list of knowledge, skills and abilities by domain also found in this handbook to best prepare for a retest. It is very important to review each of the domains and the knowledge, skills and abilities the candidate is expected to have competence in, as there is more than one version of the final exam.

## EVALUATION OF ITEMS AND EXAMINATION

### *Evaluating Item Performance and Calculating Score Reliability for the Exercise Oncology Instructor Certification Exam*

The MTCA Instructor CB is committed to maintaining the highest standards of quality, fairness, and reliability in the examination process. To achieve these goals, it is essential to continuously assess and enhance item performance while also calculating and reporting estimates of score reliability, decision consistency, and standard errors of measurement. The methods employed for these evaluations are tailored to the specific characteristics of the certification exam.

1. *Item Performance Evaluation:*

**Item Analysis:** After each exam administration, the CB conducts a comprehensive item analysis to assess the performance of individual exam items. This analysis includes statistical metrics such as item difficulty, discrimination, and point-biserial correlation.

**Content Review:** Expert panels comprising experienced EOIs and subject matter experts review exam items to ensure they align with the most current and relevant knowledge and practices in the field.

**Bias and Sensitivity Review:** Items are also reviewed for potential bias or sensitivity issues to ensure fairness for all candidates.

2. *Score Reliability Calculation:*

**Internal Consistency:** For exams with multiple-choice or similar item formats, the CB calculates Cronbach's alpha coefficient to assess the internal consistency of the exam. This statistic measures how closely related a set of items is as a group.

**Test-Retest Reliability:** In some cases, a subgroup of candidates may take a form of the exam at two different time points. Test-retest reliability is calculated to assess the consistency of scores over time.

3. *Decision Consistency Assessment:*

**Cut Score Evaluation:** The CB regularly reviews and evaluates the cut score (the minimum passing score) to ensure that it is appropriate and reflects the knowledge and skills required of a qualified EOI.

**Pass Rates:** The CB monitors pass rates and performs analyses to ensure that the certification process maintains appropriate standards of rigor while also being fair and attainable for qualified candidates.

4. *Standard Errors of Measurement:*

**SEM Calculation:** The standard error of measurement (SEM) is calculated to provide an estimate of the variability in scores that can be attributed to measurement error. This information is valuable for interpreting individual scores and establishing score confidence intervals.

5. *Ongoing Improvement:*

**Continuous Review:** The CB conducts regular reviews and refinements of exam content and administration procedures based on item performance data, candidate feedback, and evolving industry standards.

**Psychometric Expertise:** The CB consults with psychometric experts to ensure that statistical methods and analyses are appropriate for the unique characteristics of the certification exam.

## FREQUENCY OF EVALUATING STANDARDS

Once an exam form is implemented, the psychometric team evaluates the statistical properties throughout the life of the test items used on that exam form, as well as the quality of pretest items used to develop future exam forms. All examination items used to build forms are reviewed and continuously monitored by the psychometric team to ensure the statistical properties meet the appropriate specifications.

## QUALITY CONTROL PROCEDURES

Each MTCA examination is developed according to specific test models and includes the newest and most up-to-date information and knowledge in the field of cancer as it relates to exercise. The test design includes ample knowledge in:

- Cancer exercise programming, fitness assessment, and evaluation
- Cancer treatment terminology and epidemiology
- Functional biomechanics, physiology & anatomy

Committee members have compiled a collection of knowledge from various texts, articles, and publications with a leading understanding in the field of exercise oncology. Questions have been compiled and assessed for difficulty by the committee using the Angoff Method and following compliance of the Standards Manual.

## EQUATING PROCEDURES

The candidate's score is derived from the number of questions answered correctly and is then converted to a scaled score ranging from 200 to 800 points, with the passing point set at a scaled score of 500.

The passing score for the MTCA EOI certification exam is set in advance and applied to all candidates' exam results. Similar to exam scoring for a wide variety of other high stakes, national standardized exams (e.g., GRE, SAT, GMAT, etc.), MTCA EOI certification exams are reported on a 200-800 score scale.

Specifically, all candidates are expected to meet the passing standard of a scaled score of 500 in order to receive a "Pass" on the MTCA EOI certification exam. This passing standard is based upon the expectations of the SMEs/test developers across all topics of the competency areas, as related to the EOI exam blueprint. Passing candidates are expected to answer a sufficient number of test questions correctly that demonstrates a summative amount of knowledge at a level of at least minimal competency or the lowest acceptable score to pass the exam.

Finally, each content area is weighted proportionally, based on the results of a periodic comprehensive job task analysis/role delineation study. In other words, some content areas are more important (thus, have more questions) and count more with respect to the overall score than other content areas. On the score report, candidates will receive their overall score, their pass/fail status, as well as a breakdown by each specific content area.

Content Area	Number of Questions	Percent of Exam
Cancer exercise programming, fitness assessment, and evaluation	28	28%
Cancer treatment terminology and epidemiology	40	40%
Functional biomechanics, physiology & anatomy	32	32%

## STANDARD SETTING

The EOI certification examination is designed to evaluate the tasks and knowledge associated with the performance of domains required for practice as an exercise trainer for someone who has cancer. Once the exams are created, the subject matter experts review each question and rate its difficulty. Using best practices dictated by the lead psychometrician, a "cut score" or passing score is developed. The current passing score is 80%. Standard setting takes place after every Job Task Analysis and as needed based on the psychometric reports and best practices. Standard settings are evaluated every three years to reflect the current practice of exercise oncology.

A criterion-referenced cut score was set to establish the minimum level of competency for the EOI examination. A modified version of the standard setting method presented by Angoff (1971) was used to establish the cut score for this assessment. The cut score panel of 10 subject matter experts evaluated whether a minimally competent candidate would correctly respond to each item on the examination and rated those items accordingly. This panel recommended setting the cut score at a raw score of 60 after two rounds of ratings and discussions. On July 15th, 2021, the Board met to evaluate and approve a raw score

cut point of 73 based on the Board’s judgment, knowledge of CPT, expertise and understanding of the market. According to Standards for Educational and Psychological Testing (2014), “the final decision about the cut scores is a policy decision typically made by a policy body.” For reporting purposes, the logit of that raw score point was transformed to a scaled score of 80 on the reporting scale that ranges from 0 to 100. The projected pass rate based upon an initial sample of candidates at this cut score was about 81%.

#### **SECURITY PROCEDURES**

We use industry-standard encryption technologies when transferring and receiving your information. Additionally, we implement commercially reasonable security measures at our physical facilities to protect against loss or misuse of your information.

## What Content Does An Exam Candidate Need To Know?

### STUDY GUIDE

#### Part 1: Pathophysiology of Cancer

1. Define Cancer.
2. How do cancer cells develop?
3. Define the following: Oncogenes, tumor-suppressor genes, tumor.
4. What is the TNM Cancer Staging System, and what does each stage mean?
5. What are the most common cancers?
6. List all of the common risk factors for cancer, including examples
7. Describe the development of cancer on a cellular level.
8. What are the mutated genes called that cause cancer through increased cell division and expression?
9. Describe the difference between a malignant and benign tumor type.
10. Define the following terms: metastasis and invasion
11. Understand the physiological toxicities (i.e., cardiac toxicity, GI distress, loss of nutrients, decline in RBC count)
12. Fill in the table with descriptions and examples for each type of cancer classification:

Classification	Description	Example
Carcinoma		
Lymphoma		
Leukemia		
Myeloma		
Sarcoma		

13. List all of the signs and symptoms of cancer that may contribute to early detection.
14. Describe each of the stages of tumors: Stage 0, Stage I, Stage II, Stage III, Stage IV
15. List the four types of biopsies used to check for breast cancer.

16. Define the following terms related to breast cancer:

1. Ductal Carcinoma in-situ (DCIS):
2. Invasive ductal carcinoma:
3. Lobular carcinoma in-situ:
4. Inflammatory breast cancer:
5. Hormone receptor breast cancer:
6. Hormone receptor-negative breast cancer:
7. HER2 positive breast cancer:
8. Triple-negative breast cancer:

17. What are the common treatments for breast cancer?

18. Explain how lymphedema is caused.

19. How is leukemia characterized? How is it classified?

20. What cancer type is the leading cause of cancer death in men and women?

21. Name the three types of lung cancer.

22. What are current options for treating cancer?

23. List common side effects of cancer treatment.

## **Part 2: Physiology of Exercise**

1. Complete the equation that describes the creation of metabolic ATP:  $\underline{\quad? \quad} + \underline{\quad? \quad} = \text{ATP}$
2. Describe the difference between aerobic and anaerobic activity.
3. List the three metabolic pathways in order that create energy.
4. Describe the five components of fitness.
5. What are three assumptions that allow for the prediction of  $\text{VO}_2$  max from submaximal exercise tests?
6. What is a typical  $\text{VO}_2$  max value for healthy adults?
7. What is RPE and when should you use it?
8. List the three different types of muscle in the body.
9. What are the contractile elements of the sarcomere that allow for muscular contractions?
10. List and describe the types of muscle contractions.
11. What is the difference between fast twitch and slow twitch muscle fibers?



12. Define the following terms related to the principles of exercise:

1. Specificity:
2. Overload:
3. Rest:
4. Reversibility:
5. Individuality:
6. Trainability:
7. Variety:
8. Maintenance:
9. Ceiling:
10. Interference:

13. In accordance with MTCA's exercise program, fill in the table with the description of each of the four phases:

<b>Phase</b>	<b>Description</b>	<b>Exercise Intensity</b>
0		40-50%
I		30-45%
II		40-60%
III		60-85%

14. How do you calculate max heart rate for an individual?

15. What is the primary emphasis of exercise intervention programs?

16. What type of information should you collect on a patient prior to beginning an exercise program?

17. What are the components of an exercise prescription and exercise program?

18. When do you progress an exercise program?

19. What should each supervised exercise training session include?

20. What are examples of upper body exercises for biceps, triceps, and deltoids?

21. What are examples of lower body exercises for hamstrings and quadriceps?



[MapleTreeCancerAlliance.org](https://MapleTreeCancerAlliance.org)