

immunological, toxicology and oncologic systems and their associated disorders enabling delivery of high-quality patient care. The course enhances clinical knowledge and diagnostic skills and expands understanding of personalized medicine approaches to immunology, toxicology and oncology. In addition, non-CME sessions provide practical training on interpreting personalized medicine laboratory results from various diagnostic providers. The course provides a strong evidence-based foundation for decision-making in the application of clinical immunology, toxicology and oncology healthcare practices through comprehensive exploration of the latest research, clinical guidelines and treatment modalities, enabling the adoption of best practices, implementation of emerging diagnostic tools and therapies and optimization of patient outcomes.

V. Course Format:

The course features both synchronous and asynchronous components, both on-ground (face-2-face) and online. The course features 17 presentations spread over 3 consecutive days and representing 24 hours of instruction by subject matter experts. The lecture materials (PowerPoint presentations) will be provided to course participants and the presentations will also be video-archived and available on the course Canvas website for review. The presentations will be complemented by a series of interactive webinars on immunology, toxicology and oncology-related topics available on Canvas together with self-assessment quizzes.

The on-ground and online course components have been selected to facilitate efficient knowledge transfer, expert subject matter guidance and active engagement coupled with accessibility, flexibility and networking and community building.

VI. Student Learning Outcomes (SLO):

By the end of this graduate course, students are expected to achieve the following knowledge, skills and competencies:

- **Knowledge Acquisition:** Demonstrate a comprehensive understanding of immunology, toxicology and oncologic systems, including how environmental toxins affect human physiology and disease. Understand how mycotoxins, bisphenol A (BPA), phthalates, microplastics, and toxic metals disrupt endocrine signaling, induce oxidative stress, and alter immune and genetic function, ultimately contributing to chronic diseases and cancers. Case studies will illustrate exposure pathways and health outcomes and analyze the molecular mechanisms underlying the adverse effects of toxins in various physiological processes.
- **Clinical Application:** Apply knowledge of immunology, toxicology and oncology to diagnose and differentiate between various immunology, toxicology and oncology disorders, considering clinical presentations and laboratory findings. Develop evidence-based treatment plans for patients with immunology, toxicology and oncologic disorders, integrating pharmacological and non-pharmacological interventions.
- **Critical Thinking and Problem Solving:** Evaluate and critique current research in immunology, toxicology and oncology assessing their relevance and potential impact on clinical practice. Solve complex clinical cases related to immunology, toxicology and oncology, integrating knowledge from multiple disciplines to formulate accurate diagnoses and treatment strategies.
- **Patient Communication:** Effectively communicate complex immunology, toxicology and oncology concepts to patients in a clear and understandable manner, promoting informed decision-making and patient engagement. Demonstrate empathy and cultural competence in interactions with patients dealing with immunology, toxicology and oncology disorders.

- **Interdisciplinary Collaboration:** Collaborate with other healthcare professionals to provide comprehensive care for patients with complex immunology, toxicology and oncologic conditions, recognizing the importance of a multidisciplinary approach. Communicate effectively with healthcare team members, including physician assistants, nurses, dietitians and other specialists, to optimize patient outcomes.
- **Research and Lifelong Learning:** Engage in critical appraisal of the latest research in immunology, toxicology and oncology, demonstrating the ability to apply new knowledge to enhance clinical practice. Develop a habit of lifelong learning by staying current with advances in immunology, toxicology and oncology through participation in professional societies, conferences, and continuing medical education.
- **Ethical and Professional Behavior:** Demonstrate ethical conduct in the practice of immunology, toxicology and oncology, respecting patient autonomy, confidentiality, and informed consent. Uphold professional standards in healthcare delivery, including awareness of potential conflicts of interest and commitment to evidence-based medicine.

VII. Course Objectives:

A list of specific learning objectives that complement the Student Learning Outcomes (SLO) is provided for each course didactic presentation in the “Modules” folder on the course Canvas website.

VIII. Required Texts and/or Readings and Course Materials:

- There are no required texts for this course.
- All course materials will be provided or are available on the course Canvas website.

IX. Supplementary (Optional) Texts and Materials:

A listing of any recommended or supplementary course materials will be provided on the course Canvas website.

X. Course Topics:

- Overview of Toxins
- Introduction to Immunology and Oncology
- Mycotoxins
- BPS's, Phthalates and Microplastics
- Toxic Metals
- How to Prevent Breast Cancer: Before and After
- The Immune Code Unlocked: The Functional and Integrative Medicine Blueprint for Allergy, Chronic Disease, and Total Immune Mastery – Part 1
- The Immune Code Unlocked: The Functional and Integrative Medicine Blueprint for Allergy, Chronic Disease, and Total Immune Mastery – Part 2
- IV Therapy Best Practices and Q&A
- Mechanisms of TPE Detoxification
- TPE and Tumor Immunology
- Toxins, Toxicants, and the Tumor Microenvironment
- The Many "Forever" Chemicals: (PFAS, PCBs, Microplastics, Organochlorine Pesticides and Adipose-Stored Solvents, Signs and Symptoms of Exposure, Sources of Exposure, Methods of Removal (Initiating Lipolysis, etc.)

- Indoor Air Exposures (Solvents, Plastics, Metals) The Toxic American Home: how Exposures Manifest in Adults and Children, How to Educate Patients about Exposures, Research Proving Removal = Health
- Toxicants as Mutagens and Carcinogens
- TPE: The Basics
- TPE: Research Results

XI. **How to Succeed in this Course:**

To succeed in a graduate immunology, toxicology and oncology course that comprises didactic lecture presentations, case studies and webinars, it is important to adopt a systematic approach to engaging with the material. A brief summary of key strategies for success could include:

Actively participate in lectures: Attending and actively participating in the didactic lecture presentations is crucial. Take detailed notes, ask questions and seek clarification when needed. Actively engage with the material to enhance understanding.

Organize and review lecture notes: After each lecture, organize any notes and review them regularly. Summarize key concepts and create a study guide that highlights important information, including key terms, theories, and mechanisms.

Utilize case studies effectively: Case studies provide practical applications of the learned concepts. Analyze and understand each case study. Apply principles to diagnose and propose treatment plans for the patients presented in the case studies. Discuss the cases with peers or faculty to gain different perspectives.

Engage in webinars: Webinars offer an interactive learning experience. Take notes during the webinar and actively participate in discussions. If possible, ask questions and seek clarification during the webinar to enhance your understanding of the topic.

Develop a study schedule: Create a study schedule to manage time effectively. Allocate specific time slots for reviewing lecture notes, working on case studies, attending webinars and preparing for assessments. A well-structured study schedule ensures coverage of all the required material while avoiding procrastination.

Seek additional resources: Supplement the course materials with additional resources such as textbooks, scholarly articles and online platforms specific to immunology, toxicology and oncology. These resources can provide a deeper understanding of complex topics and offer alternative explanations that may enhance comprehension.

Collaborate with peers: Engage in group discussions with your peers. Collaborative learning also fosters a supportive environment where resources can be shared and ideas exchanged.

Practice self-assessment: Regularly test your knowledge through self-assessment.

Stay organized, be aware and manage deadlines. Keep track of assignment due dates and webinar timings. Stay organized by using a planner or digital calendar.

XII. **Academic Continuity:**

During any semester, there is a possibility the course may be disrupted due to unforeseen circumstances, such as major weather events. All program participants will be notified by email and contingency plans announced.

XIII. **Communication:**

Course directors will communicate important dates and assignment deadlines via Canvas “announcements” and email notifications. Course participants can contact the program directors via email outside of class sessions, whether through Canvas mail or directly through email. Email responses will generally be provided with 48 hours on business days.

XIV. Grading Scale:

The standard MCOM course assignment grading scale (with plus/minus scaling) will be applied to all course assessment activities:

			A	92-100	4.00	A-	89-91	3.67
B+	87-88	3.33	B	82-86	3.00	B-	79-81	2.67
C+	77-78	2.33	C	72-76	2.00	C-	69-71	1.67
D+	67-68	1.33	D	62-66	1.00	D-	59-61	0.67
			F	<59	0.00			

XV. Grade Categories and Weights:

Assessments in the course require the submission of 2 patient case study reports which represent **80%** of the course grade together with attendance at 2 or more webinars that represent **20%** of the course grade. The “Fast-Five” self-assessment quizzes do not count towards the overall course grade. The course activities are designed to explore “authentic” assessments, which are based as closely as possible on real world experiences.

Graded Items	Percent of Final Grade
Case Study Reports	80%
Webinar Participation and Summary	20%
Fast-Fives Quizzes - Self-Assessment	0%

All assessments must be completed and an overall final grade of $\geq 80\%$ to receive a digital “badge” in this course.

Case Report Assignments:

Course participants are required to complete two (2) patient case reports as part of the course assessment activities. An example of a patient case report is provided on the course Canvas website and can be utilized as a template for case report assignment submissions. Case study reports should be submitted by the deadlines indicated in Canvas.

Participation and Engagement:

Attendance and participation in a minimum of **2** webinars is required as part of the course activities. Course participants should submit a **300-word** summary of any of the immunology, toxicology and oncology webinars they attend (minimum of 2) using the appropriate links in the “Assignment” folder. A list of the course webinars and topics is provided on the course Canvas website. Active engagement and participation in all class sessions is strongly encouraged.

Immunology, Toxicology and Oncology Self-Assessment Quizzes:

For each of the course presentations, a short self-assessment multiple-choice question (MCQ) quiz is provided that course participants can utilize to assess their comprehension of the lecture materials. The grades for the self-assessment quizzes do NOT count as part of the grade for the course digital badge.

XVI. Instructor Feedback Policy & Grade Dissemination:

Students will be notified of their grades on the various course assignments via the course “Gradebook” that is available on the course Canvas website.

XVII. Course Schedule:

The Module IV “Immunology, Toxicology and Oncology” course begins on **March 20th, 2026** and concludes at 11.00 pm EST on **March 22nd, 2027**.

The Course Schedule is available on the course Canvas website and includes the dates and times of the on-ground presentations which begin on **March 20th, 2026** and conclude at 6.00 pm EST on **March 22nd, 2026**.

Deadlines for the completion of the various course assignments are indicated on the course Canvas website with completion deadlines that expire prior to the end of the course in December.

XVIII. USF Core Syllabus Policies:

USF has a set of central policies related to student recording class sessions, academic integrity and grievances, student accessibility services, academic disruption, religious observances, academic continuity that **apply to all courses at USF**. Be sure to review these online: usf.edu/provost/faculty-success/resources-policies-forms/core-syllabus-policy-statements.aspx

XIX. Course Policies:

Make-Up Policy on Missed Assignments: Course participants are required to complete the course assessment activities by the dates and times indicated on the course Canvas website. Alternative dates for assignments are only given due to significant extenuating circumstances or emergencies. Students are required to provide appropriate documentation to verify the extenuating circumstance; documentation must include specific dates. Circumstances and documentation will be determined acceptable by the course director BEFORE a student will be granted an extension of time to complete an assignment.

Campus Free Expression:

It is fundamental to the University of South Florida’s mission to support an environment where divergent ideas, theories, and philosophies can be openly exchanged and critically evaluated. Consistent with these principles, this course may involve discussion of ideas that you find uncomfortable, disagreeable, or even offensive.

In the instructional setting, ideas are intended to be presented in an objective manner and not as an endorsement of what you should personally believe. Objective means that the idea(s) presented can be tested by critical peer review and rigorous debate, and that the idea(s) is supported by credible research.

Not all ideas can be supported by objective methods or criteria. Regardless, you may decide that certain ideas are worthy of your personal belief. In this course, however, you may be asked to engage with complex ideas and to demonstrate an understanding of the ideas. Understanding an idea does not mean that you are required to believe it or agree with it.

XX. Course Policies - Technology and Media:

Canvas: This course will be supported via USF's Corporate Training and Professional Education’s learning management system (LMS), Canvas. If you need help learning how to perform various tasks related to this course in Canvas, please view or consult the Canvas help guides. You may also contact USF's IT department at (813) 974-1222 or help@usf.edu.

Recordings:

In this class, software will be used to record live class lectures and discussions. As a student in this class, your participation in live class discussions will be recorded. These recordings will be made available only to students enrolled in the class, to assist those who cannot attend the live session or

to serve as a resource for those who would like to review content that was presented. Students who prefer to participate via audio only will be allowed to disable their video camera so only audio will be captured. Please discuss this option with your instructor.

WhatsApp, GroupMe, and Student-to-Student Communication:

While students may use digital communication tools (WhatsApp, GroupMe, etc.) to communicate with fellow students, it is important to remember that academic integrity policies still apply in these environments. Informing others about the contents of tests is prohibited by [the official regulation](#), as is receiving unauthorized information about an examination. Students are expected and required to immediately report instances of such violations to the instructor.

XXI. Course Policies - Student Expectations:

Title IX provides federal protections for discrimination based on sex, which includes discrimination based on pregnancy, sexual harassment, and interpersonal violence. In an effort to provide support and equal access, **USF has designated all faculty (TA, Adjunct, etc.) as Responsible Employees, who are required to report any disclosures of sexual harassment, sexual violence, relationship violence or stalking.** The Title IX Office makes every effort, when safe to do so, to reach out and provide resources and accommodation and to discuss possible options for resolution. Anyone wishing to make a Title IX report or seeking accommodation may do so online, in person, via phone, or email to the Title IX Office. For information about Title IX or for a full list of resources please visit: <https://www.usf.edu/title-ix/gethelp/resources.aspx>. *If you are unsure what to do, please contact Victim Advocacy – a confidential resource that can review all your options – at 813-974-5756 or va@admin.usf.edu.*

Course Hero / Chegg Policy:

The [USF Policy on Academic Integrity](#) specifies that students may not use websites that enable cheating, such as by uploading or downloading material for this purpose. This does apply specifically to Chegg.com and CourseHero.com – almost any use of these websites (including uploading proprietary materials) constitutes a violation of the academic integrity policy.

Professionalism Policy:

Per university policy and classroom etiquette, mobile phones, iPods, etc. must be silenced during all course in-person activities.

End of Semester Student Evaluations:

All courses at USF make use of an online system for students to provide feedback to the University regarding the course. These surveys will be made available at the end of the course and the institution will notify you by email when the response window opens. Your participation is highly encouraged and valued.

Turnitin.com:

In this course, [turnitin.com](http://www.turnitin.com) may be utilized. Turnitin is an automated system which instructors may use to quickly and easily compare each student's assignment with billions of web sites, as well as an enormous database of student papers that grows with each submission. Accordingly, you may be expected to submit all assignments in both hard copy and electronic format. After the assignment is processed, instructors receive a report from [turnitin.com](http://www.turnitin.com) that states if and how another author's work was used in the assignment. For a more detailed look at this process visit <http://www.turnitin.com>.

Netiquette Guidelines:

1. Act professionally in the way you communicate. Treat your instructors and peers with respect, the same way you would do in a face-to-face environment. Respect other people's ideas and be constructive when explaining your views about points you may not agree with.
2. Be sensitive. Be respectful and sensitive when sharing your ideas and opinions. There will be people in the course class with different linguistic backgrounds, political and religious beliefs or other general differences.
3. Proofread and check spelling. Doing this before sending an email or posting a thread on a discussion board will allow you to make sure your message is clear and thoughtful. Avoid the use of all capital letters, it can be perceived as if you are shouting, and it is more difficult to read.
4. Keep your communications focused and stay on topic. Complete your ideas before changing the subject. By keeping the message on focus you allow the readers to easily get your idea or answers they are looking for.
5. Be clear with your message. Avoid using humor or sarcasm. Since people can't see your expressions or hear your tone of voice, meaning can be misinterpreted.

XXII. Learning Support:

Canvas Technical Support

Students can find technical support using the following resources:

A "Canvas Student Guide" that may help with any technical difficulties in Canvas can be viewed at:

<https://community.canvaslms.com/t5/Student-Guide/tkb-p/student>

You can also contact the help desk by calling 813-974-1222 in Tampa or emailing help@usf.edu.

[IT website for the Tampa campus.](#)

XXIII. Important Dates for 2026:

All course dates and assignments are tentative and can be changed at the discretion of the professor. For important USF dates, see the [Academic Calendar](#) at <http://www.usf.edu/registrar/calendars/> or the brief list below.