XML Course Syllabus

Introduction to XML for Publishing is a one-day course that provides the foundations of how and where XML is used. Learn about ways XML is used to create, organize, and manage structured content in publishing workflows. This XML course introduces the foundational concepts of XML, including elements, attributes, hierarchy, tagging, and document structure, with an emphasis on how XML supports content reuse across print, web, ePub, databases, and other digital formats.

Learn how structured content differs from visual page design and why XML is valuable for improving consistency, efficiency, and automation in editorial and production environments. Through publishing-focused examples and hands-on practice, learners gain a practical understanding of how XML works and how it fits into modern content creation and publishing systems.

What you learn in this XML course

- What is XML and why it is used in publishing
- How structured content differs from formatted or layout-driven content
- How to read and understand XML
- The purpose of elements, attributes, nesting, and document hierarchy
- The rules of well-formed XML and how to avoid common syntax errors
- How XML helps publishers reuse content across print, web, eBooks, and other formats
- The difference between semantic tagging and visual formatting
- The role of schemas, validation, and document rules in structured publishing
- How XML connects with publishing tools, content management systems, and automated workflows
- How to perform basic XML editing and markup tasks for publishing content

XML Course Topics

1. What Is XML and Why Does It Matter in Publishing

- What XML is and what the name means
- How XML differs from HTML and other markup languages
- The difference between structured content and layout-driven content
- Why publishers use XML: consistency, reuse, automation, and multi-channel delivery
- Common publishing use cases: books, journals, technical documentation, training materials, digital products

2. XML in Publishing Workflows

- How modern publishing workflows are structured
- Single-source publishing: one content source, many outputs
- Separating content from presentation
- How XML supports editorial, production, and content management processes
- XML as a foundation for automation and consistency across teams

3. XML Structure: Elements, Hierarchy, and Attributes

- The building blocks of XML: elements, tags, and text content
- Opening tags, closing tags, and empty elements
- Parent, child, and sibling relationships
- Nesting, hierarchy, and the root element
- Attributes: what they are and when to use them
- Why clean, logical structure matters

4. XML Syntax Rules and Well-Formed Documents

- Core syntax rules: proper nesting, case sensitivity, closing tags, quoted attribute values, one root element
- Special characters and escaping reserved symbols
- The difference between well-formed and invalid XML
- Common beginner mistakes and how to recognize them

5. Reading and Interpreting XML in Publishing

- How to approach an unfamiliar XML file
- Identifying document sections, hierarchy, and content types
- Recognizing tagged content: headings, paragraphs, lists, tables, metadata
- Reviewing and discussing sample XML from a real publishing workflow
- Translating XML structure into meaningful content

6. Semantic Tagging and Content Modeling

- Why tags should describe meaning, not appearance
- Examples of semantic tagging in publishing: chapter, title, author, body, section, sidebar, note, figure
- Thinking about content as structured, reusable components
- Introduction to content modeling: how publishers define consistent tagging systems

- Why tagging consistency matters for reuse and automation

7. Document Rules, Schemas, and Validation

- Why XML documents used in publishing need defined rules
- Introduction to DTDs and schemas (conceptual overview)
- What validation means and why it matters
- How validation prevents production errors and enforces consistency
- Examples of required and optional elements in publishing schemas
- Awareness of common industry standards: DocBook, DITA, JATS, ONIX, and custom publishing models

8. Hands-On Practice and Putting It All Together

- Opening and reviewing a sample XML file
- Identifying errors in marked-up content
- Editing tags and attributes
- Creating a simple XML document from plain text (title, subtitle, author, headings, paragraphs, image caption)
- Checking structure for well-formedness
- Brief overview of how XML becomes final output: transformation concepts, XSLT, CSS, print/PDF/web/ePub
- Best practices: semantic tagging, clean structure, avoiding layout-driven decisions, planning for reuse

XML Course Faculty

The faculty teaching XML courses at American Graphics Institute are experts in the fields of XML and multi format publishing. They have decades of experience in print and web publishing workflows.

Custom, private, and corporate AI UX courses

This XML course is primarily available as a private class for corporations and groups. Curriculum is customized for your specific needs. Courses can be delivered online, at your location, or in our classrooms. For more information, call 781-376-6044 to speak with an American Graphics Institute training consultant or contact us.