# MMDP 234 XML/XSL

# Midterm Exam Preparation Guide

Midterm Exam will be a “hands on”, “closed book” test.

* You can use notes (digital, hand-written)
* You can use your previous works as a reference.
* You can also use the Internet. Before the test, choose the website you are planning to use for reference. There is a link to such a website (w3schools) posted on the Lessons tab < Resources folder.

**Restrictions:** You will not be allowed to

1. use books of any kind during the test.
2. use your laptop during the test.
3. use e-mail.
4. flash drives are not allowed in the computers during the test. Prepare the material you will be using during the test and place it in a separate folder on your flash drive. You will copy that folder to your workstation before the test starts.

The test covers material from **Tutorials 1, 2, and 3** of our text book. The test will look like a tutorial with the steps to follow written out.

Following is the list of topics we have learned so far. Most of these topics will appear on the test. You can use this list as a start for your cheat sheet.

**Tutorial 1**

1. XML declaration <?xml version="1.0" encoding="UTF-8" standalone="no" ?>
2. Comments <!-- -->
3. Elements:
   1. two-sided tags <course\_name>XML/XSL</course\_name>
   2. empty elements, one-sided tags <img />
4. Element hierarchy charted with the tree **diagram**. Special symbols used:
   1. ? - child element occurs once or not at all
   2. \* - child element occurs once or not at all
   3. + - child element occurs at least once
   4. [none] - no symbol is used when the parent contains a single occurrence of the child element
5. Attributes <track **length=”9:22”**>So What</track>
6. Character and entity references: &#38; and &amp;
7. CDATA section <![CDATA[ Some <<< Text>>> ]]>
8. Checking if the document is well formed
9. Applying style sheet to the XML document <?xml-stylesheet type=”text/css” href-“st.css” ?>

**Tutorial 2**

1. Declaring a namespace: <mod:model id="pr205" xmlns:mod =<http://jacksonelect.com/models>>
2. Applying namespace prefexes <mod: title>Laser405</mod:title>
3. Default namespace
4. Declaring namespace in a stylesheet @namespace …
5. Applying namespace to a selector:
   1. mod|title{width: 150px;}
   2. with escape character (for IE) : mod\:title{width: 150px;}
6. Combining XML and XHTML documents

**Tutorial 3**

1. Declaring DTD
   1. as external file <!DOCTYPE customers SYSTEM “rules.dtd”>
   2. As internal subset <!DOCTYPE [ *declarations* ]>
   3. As external subset with public identifier
2. Declaring elements <!ELEMENT *element content-model*>. The content models include but not limited to the following set:
   1. Empty <!ELEMENT *img EMPTY*>
   2. Parced Character Data <!ELEMENT name (#PCDATA)>
   3. Set of child elements:
      1. Sequence: <!ELEMENT customer (name, phone email)>
      2. Choice: <!ELEMENT customer (name | company)>
      3. Modifying symbols -- see the full list in Tutorial 1, item 4. <!ELEMENT customers (customers+) >
   4. Mixed content
3. Declaring attributed <!ATTLIST *element attribute1 type1 default1*>
   1. Attribute types:
      1. CDATA: <!ATTLIST item itemQty **CDATA** #REQUIRED>
      2. enumerated types:

<!ATTLIST customer custType **( home| business)** #REQUIRED>

* + 1. ID, IDREF, IDREFS

ATTLIST order orderID **ID** #REQUIRED>

* 1. Attribute Defaults: #REQUIRED, #IMPLIED, #FIXED

1. Validating a document with Exchanger
2. General Entities:
   1. <!ENTITY av “Alexandra Vaschillo”>. In XML document av can be used as an entity reference (see Tut. 1, item 6).
   2. <!ENTITY avFile SYSTEM “description.xml” > -- can be used to add the whole XML document to the current document

1. Parameter reference -- needed to add pieces to the DTD:

<!ENTITY % avDTD SYSTEM “piece01.dtd” >

%avDTD;

1. Unparsed data and Notations are not going to be present on the test