

### COURSE MAM3120: E-COMMERCE 3

<b>Level:</b>	Advanced
<b>Theme:</b>	Marketing Systems and Strategies
<b>Prerequisite:</b>	MAM2110: E-commerce 2
<b>Description:</b>	Students will investigate strategies to gather customer information and design e-commerce Web sites that take advantage of technological advances.

**Parameters:** Access to a computer workstation, word processing and Web site design software, and the Internet. Free or shareware packages that assist in Web site design are available.

**Supporting Courses:** INF1030 Word Processing 1, INF2130 Multimedia Authoring 1, INF2060 Electronic Publishing 1, ENT2030 Marketing the Venture

#### Curriculum and Assessment Standards

General Outcomes	Assessment Criteria and Conditions	Suggested Emphasis
<p><i>The student will:</i></p> <ul style="list-style-type: none"><li>research the challenges of obtaining customer information</li></ul>	<p><i>Assessment of student achievement should be based on:</i></p> <ul style="list-style-type: none"><li>a report that:<ul style="list-style-type: none"><li>lists ways to obtain customer data (data mining)</li><li>outlines possible uses of customer data</li><li>outlines features to include in a relational database and methods of ensuring accurate data entry (field properties)</li><li>describes options to obtain database software</li><li>describes the use of cookies</li><li>provides a design of a registration form and a list of possible incentives for customers to register.</li></ul></li></ul> <p><i>Assessment Tool</i> <i>Assessment Guide: E-commerce 3 (MAM3120-1)</i></p> <p><i>Standard</i> <i>Rating of 3 for the applicable task in the Assessment Guide</i></p>	10

**COURSE MAM3120: E-COMMERCE 3 (continued)**

General Outcomes	Assessment Criteria and Conditions	Suggested Emphasis
<p><i>The student will:</i></p> <ul style="list-style-type: none"> <li>• research financial considerations when developing and maintaining an e-commerce Web site</li>   <li>• analyze features of effective e-commerce Web sites</li> </ul>	<p><i>Assessment of student achievement should be based on:</i></p> <ul style="list-style-type: none"> <li>• a report that:               <ul style="list-style-type: none"> <li>– researches the costs and benefits of different methods of publishing an e-commerce Web site</li> <li>– lists potential income-generating opportunities</li> <li>– identifies technological advances in Web site development.</li> </ul> </li> </ul> <p><i>Assessment Tool</i>  <i>Assessment Guide: E-commerce 3 (MAM3120-1)</i></p> <p><i>Standard</i>  <i>Rating of 3 for the applicable task in the Assessment Guide</i></p> <ul style="list-style-type: none"> <li>• an analysis of the content and design/technical features observed in at least three award-winning e-commerce Web sites.</li> </ul> <p><i>Assessment Tool</i>  <i>Research Process: Features of Effective E-commerce Web Sites (MAM3120-2)</i></p> <p><i>Standard</i>  <i>All applicable sections have been completed</i></p>	<p>10</p>      <p>10</p>

**COURSE MAM3120: E-COMMERCE 3 (continued)**

General Outcomes	Assessment Criteria and Conditions	Suggested Emphasis
<p><i>The student will:</i></p> <ul style="list-style-type: none"> <li>• design two or more e-commerce Web sites that obtain customer information</li> </ul>	<p><i>Assessment of student achievement should be based on:</i></p> <ul style="list-style-type: none"> <li>• the descriptions of each of the proposed e-commerce Web sites</li> <li>• the storyboards for each of the e-commerce Web sites that outline the page layout and navigation links, including:               <ul style="list-style-type: none"> <li>– special effects, such as pictures, photographs, graphics, sound, multimedia (audio, animation), 3-D graphics, 3-D animation, navigation menus, bars, links (text, icon, hover button, image map, banner ad) and video of key staff person</li> <li>– additional content, such as e-mail contact; detailed product information for four products/services; policies for privacy, security and terms of business; What’s New; ten frequently asked questions; news release; and registration form, with incentives</li> </ul> </li> <li>• the development of the Web sites, using available software, that incorporates all required features and demonstrates effective principles of Web site design</li> <li>• a test and presentation of each of the e-commerce Web sites, including reviewers’ comments</li> <li>• an outline of recommended changes for each of the Web sites</li> <li>• the modifying, publishing and documenting of the e-commerce Web sites.</li> </ul> <p><i>Assessment Tool</i>  <i>Assessment Task: E-commerce Web Site Evaluation (MAM3120–3)</i></p> <p><i>Standard</i>  <i>All applicable sections have been completed</i></p>	<p>60</p>

**COURSE MAM3120: E-COMMERCE 3 (continued)**

General Outcomes	Assessment Criteria and Conditions	Suggested Emphasis
<p><i>The student will:</i></p> <ul style="list-style-type: none"> <li>• apply, consistently, appropriate workstation routines</li> <li>• demonstrate basic competencies.</li> </ul>	<p><i>Assessment of student achievement should be based on:</i></p> <ul style="list-style-type: none"> <li>• demonstration of appropriate workstation routines.  <i>Assessment Tool</i>  <i>Assessment Checklist: Workstation Routines and Management (INFWRKSTN)</i>  <i>Standard</i>  <i>Rating of:</i>  3 – <i>Workstation Routines</i>  3 – <i>File Management</i>  3 – <i>Time Management/Organization</i>  3 – <i>Professionalism</i></li> <li>• observations of individual effort and interpersonal interaction during the learning process.  <i>Assessment Tool</i>  <i>Basic Competencies Reference Guide and any assessment tools noted above.</i></li> </ul>	<p>10</p> <p>Integrated throughout</p>

**COURSE MAM3120: E-COMMERCE 3 (continued)**

Concept	Specific Outcomes	Notes
Data Mining	<p><i>The student should:</i></p> <ul style="list-style-type: none"> <li>• identify methods of obtaining (mining) customer information, including geographic, demographic, psychographic and behavioural information:               <ul style="list-style-type: none"> <li>– give customers the choice to register in a guest book</li> <li>– gather data that comes in when a customer places an order (cookies)</li> <li>– summarize e-mail messages from customers and distribute to in-house departments</li> <li>– count visitor hits on a Web site and on individual pages (ISP may offer this service for free)</li> <li>– use a log to analyze what users value most on your Web site, and identify if there are any navigational problems</li> </ul> </li> <li>• outline possible uses of customer data, such as:               <ul style="list-style-type: none"> <li>– greeting customers by name</li> <li>– modifying the information presented to customers, and providing recommended buying lists and information on sales and discounts, based on customers' shopping histories</li> <li>– providing personal shopping representatives to assist customers.</li> </ul> </li> </ul>	<p>Customer Information (data mining):</p> <ul style="list-style-type: none"> <li>• Geographic: region, city, urban, suburban, rural</li> <li>• Demographic: age, income, education, occupation, gender, marital status, household size, ethnic background</li> <li>• Psychographic: lifestyles, activities, interests, opinions</li> <li>• Behavioural: occasion for use, benefits sought, usage rate, degree of loyalty.</li> </ul> <p>ISP (Internet Service Provider).</p> <p>Recent Marketing Strategies:</p> <ul style="list-style-type: none"> <li>• “Push” technology</li> <li>• Web skins.</li> </ul> <p>Note: Visible counts of hits on a Web site may or may not be advantageous.</p>
Using Databases to Gather Information	<ul style="list-style-type: none"> <li>• identify various databases that can be obtained to support:               <ul style="list-style-type: none"> <li>– customer information</li> <li>– order tracking</li> <li>– e-mail addresses</li> <li>– product-related or technical-related information</li> </ul> </li> <li>• list data fields and field properties to include in a registration form; e.g., geographic, demographic, psychographic.</li> </ul>	<p>Databases can be:</p> <ul style="list-style-type: none"> <li>• part of hosting software</li> <li>• purchased</li> <li>• obtained as freeware.</li> </ul>

**COURSE MAM3120: E-COMMERCE 3 (continued)**

Concept	Specific Outcomes	Notes
Using Cookies	<p><i>The student should:</i></p> <ul style="list-style-type: none"> <li>• describe how cookies work to identify customers and their habits and outline information that can/cannot be retrieved.</li> </ul>	<p>A cookie is a data file stored on the customer's hard drive that records the customer's activities on each visit to the Web site.</p>
Designing a Registration Form	<ul style="list-style-type: none"> <li>• design a registration form to obtain customer information that contains:               <ul style="list-style-type: none"> <li>– text entry boxes</li> <li>– form validation; e.g., field masks that limit type of entry or space for text when applicable</li> <li>– hidden fields displayed with an asterisk (*)</li> <li>– check boxes to indicate one or more chosen options</li> <li>– pop-up menus and scrolling menus to provide choices</li> <li>– plain push buttons or more creative buttons; e.g., SUBMIT to send form data to the server, RESET to clear all form fields.</li> </ul> </li> </ul>	<p>Use table structure to align components of the registration form.</p>
Incentives to Complete Registration Form	<ul style="list-style-type: none"> <li>• list possible incentives to motivate the customer to register; e.g., free items, discounts, rewards, contests.</li> </ul>	

**COURSE MAM3120: E-COMMERCE 3 (continued)**

Concept	Specific Outcomes	Notes
<p>Financial Considerations</p> <ul style="list-style-type: none"> <li>• Costs and Benefits of Developing and Maintaining an E-commerce Web Site</li> <li>• Potential Income-generating Opportunities</li> <li>• Technological Advances</li> </ul>	<p><i>The student should:</i></p> <ul style="list-style-type: none"> <li>• compare different ways of hosting e-commerce Web sites in terms of degree of control of operations and improvements, costs (development and transaction), and processing speed:               <ul style="list-style-type: none"> <li>– Outsourced hosting                   <ul style="list-style-type: none"> <li>• no charge with limited options</li> <li>• no charge in exchange for placing advertisements</li> <li>• fee as part of other telecommunication services; e.g., telephone, cable services</li> <li>• fee for limited services; e.g., software package used to develop/host e-commerce Web site</li> <li>• fee for comprehensive services; e.g., connections to in-house business systems, Web space added to other services</li> </ul> </li> <li>– Web hosting on own Web site                   <ul style="list-style-type: none"> <li>• hire professionals to design and program</li> <li>• purchase software—build and maintain Web site (possibly outsource data management and secure payments system)</li> <li>• program your own site—full control of operations</li> </ul> </li> </ul> </li> <li>• list potential income-generating opportunities, such as:               <ul style="list-style-type: none"> <li>– sales of goods and services</li> <li>– partnerships</li> <li>– auctions (general consumer, specialty consumer)</li> </ul> </li> <li>• identify technological advances in e-commerce Web site development, including:               <ul style="list-style-type: none"> <li>– connection options with customer, network, e-commerce Web site and browser</li> <li>– software</li> <li>– hardware</li> <li>– wireless mobile devices</li> <li>– security and privacy systems.</li> </ul> </li> </ul>	<p>Operational costs can be based on paying a flat fee, a fee per transaction and/or percentage of total sale (1.5% – 9%).</p> <p>Examples of software packages used to develop/host e-commerce Web sites:</p> <ul style="list-style-type: none"> <li>• Macromedia Dreamweaver</li> <li>• Microsoft FrontPage</li> <li>• Microsoft Commerce Manager</li> <li>• Yahoo!Merchant Solutions.</li> </ul> <p>Examples of programming languages include Java, C++, JavaScript, VBScript, Perl/CGI, HTML, SML, XSL, ASP and DHTML.</p> <p>Factors Affecting Processing Speed:</p> <p><i>Customer</i></p> <ul style="list-style-type: none"> <li>• speed of local system</li> <li>• speed of browser</li> <li>• user’s connection speed.</li> </ul> <p><i>Network</i></p> <ul style="list-style-type: none"> <li>• amount of data sent (text, images)</li> <li>• optimizing graphics to reduce bandwidth requirements</li> <li>• network outages</li> <li>• latency from extreme physical distance</li> <li>• effects of protocols like TCP/IP or HTTP.</li> </ul> <p><i>E-commerce Web site</i></p> <ul style="list-style-type: none"> <li>• speed of the server: CPU, disk drive</li> <li>• load on the server</li> <li>• traffic caused by other server processes</li> <li>• traffic caused by other Web users.</li> </ul>

**COURSE MAM3120: E-COMMERCE 3 (continued)**

Concept	Specific Outcomes	Notes
<p>Features of Effective E-commerce Web Sites</p> <ul style="list-style-type: none"> <li>• Content-related Features</li> </ul>	<p><i>The student should:</i></p> <ul style="list-style-type: none"> <li>• analyze the following content-related features of effective e-commerce Web sites:               <ul style="list-style-type: none"> <li>– the home page shows the main components of the Web site effectively</li> <li>– the search function allows efficient access to information</li> <li>– company information is included; e.g., name of company, address, telephone number, fax number, e-mail contact, list of key personnel, video of key staff person</li> <li>– company policies on privacy, security and terms of business are clearly stated</li> <li>– products/services are effectively displayed—name, code, description, price, option to buy, link to shopping cart, detailed product information</li> <li>– the shopping cart indicates purchase name, code, price(s), discount, shipping costs, taxes and total costs</li> <li>– the shopping cart provides options to delete the purchase(s), continue shopping or check out with a link to shipping choices</li> <li>– the shipping choices and costs are clear (courier, postal service, bus, rail, air, truck) and there is a link to payment choices</li> <li>– the payment choices are clear—credit card, debit card, electronic cash</li> <li>– forms to gather customer information are well-designed</li> <li>– incentives to register are clear and attract attention</li> <li>– drop-down menus assist in filling out forms</li> <li>– additional content is offered to attract customers; e.g., detailed product/service information, frequently asked questions, “What’s New,” newsroom, forum, Web site tour, thank-you page, games</li> <li>– text is appropriate for potential customers</li> <li>– text is accurate—no errors in spelling, punctuation, grammar</li> </ul> </li> </ul>	<p>Considerations for developing content:</p> <ul style="list-style-type: none"> <li>• present ideas in an easy-to-follow fashion (estimated viewer attention span is 10 seconds)</li> <li>• place most requested information in “front” of Web site, least requested in “back”</li> <li>• keep documents as simple as possible</li> <li>• use language that is appropriate for the target market.</li> </ul>

**COURSE MAM3120: E-COMMERCE 3 (continued)**

Concept	Specific Outcomes	Notes
<p>Features of Effective E-commerce Web Sites (continued)</p> <ul style="list-style-type: none"> <li>• Design- and Technical-related Features</li> </ul>	<p><i>The student should:</i></p> <ul style="list-style-type: none"> <li>• analyze the following design- and technical-related features of effective e-commerce Web sites: <ul style="list-style-type: none"> <li>– the overall impact of the Web site is positive and motivating</li> <li>– the Web site aligns with potential customers’ interests and needs</li> <li>– the pages are consistent in format, text size, font, headings and colour</li> <li>– colour contrast helps items stand out or blend in</li> <li>– the background is effective</li> <li>– special effects have been added and are appropriate; e.g., pictures, photographs, graphics, sound, borders, audio, animation, video, marquee, 3-D graphics, 3-D animation</li> <li>– the home page provides clear links to other pages of the Web site</li> <li>– navigation methods are effective; e.g., menus, bars, links (text, icon, banner ad, hover button, image map)</li> <li>– navigation throughout the Web site is efficient (three or fewer “clicks”)</li> <li>– after the home page, navigation links are positioned in a standard location</li> <li>– the organization of information is efficient (least used at “back” of Web site)</li> <li>– the processing speed is acceptable throughout the Web site</li> <li>– the domain name (URL) is indicative of the products/services offered</li> <li>– viewers have the option to register and the ability to ask questions, request information and give feedback</li> <li>– viewers have the option to control viewing choices; e.g., text only, view videos, turn off sound, enlarge/reduce picture size, customize the home page, select language.</li> </ul> </li> </ul>	<p>Components of an E-commerce Web Site:</p> <ul style="list-style-type: none"> <li>• home page can include business description, logo, domain name, navigation to other pages, guest book or other customer registration options</li> <li>• information pages can include company information, such as contacts, location, policies on privacy and security, terms of business, “What’s New”</li> <li>• descriptions of products/services (catalogue)</li> <li>• a shopping cart</li> <li>• shipping choices</li> <li>• payment choices.</li> </ul>

**COURSE MAM3120: E-COMMERCE 3 (continued)**

Concept	Specific Outcomes	Notes
<p>Process of Building E-commerce Web Sites</p>	<p><i>The student should:</i></p> <ul style="list-style-type: none"> <li>• complete the process of building two or more e-commerce Web sites, by:               <ul style="list-style-type: none"> <li>– planning the Web sites</li> <li>– developing the Web sites, including:                   <ul style="list-style-type: none"> <li>• content-related features</li> <li>• design- and technical-related features</li> </ul> </li> <li>– testing and presenting the Web sites</li> <li>– modifying, publishing and documenting the Web sites.</li> </ul> </li> </ul>	<p>A detailed list of tasks to build an e-commerce Web site is outlined in <i>Assessment Task: E-commerce Web Site Evaluation (MAM3120-3)</i>.</p>
<p>Workstation Management</p>	<ul style="list-style-type: none"> <li>• apply efficient workstation positions and routines that encourage:               <ul style="list-style-type: none"> <li>– good health and safety (posture, positioning of hardware and furniture)</li> <li>– security for hardware, software, supplies and personal work</li> </ul> </li> <li>• demonstrate efficient and appropriate use of time and resources:               <ul style="list-style-type: none"> <li>– start-up procedures</li> <li>– organization of work area</li> <li>– closing procedures</li> </ul> </li> <li>• apply effective decision-making strategies when using the Internet</li> <li>• use related terminology to describe basic protocols, processes and tools.</li> </ul>	