

# CS 519 Distributed Commerce Technologies Syllabus

The syllabus below describes a recent offering of the course, but it may not be completely up to date. For current details about this course, please contact the course coordinator. Course coordinators are listed on the course listing for undergraduate courses and graduate courses.

## Text Books

### Required

Henrik Kniberg , *Scrum and XP from the Trenches: How we do Scrum* , C4Media, 2007

## Week-by-Week Schedule

| Week | Topics Covered   | Reading | Assignments |
|------|--|---------|-------------|
| 1    | - What's ecommerce - A little bit of history/ timeline - Our favorite ecomm websites. Why we like them? What do we expect in a good (and a bad) eCommerce website (speed, reliability, assortment, availability, delivery options, delivery cost) - Types of ecomm websites (goods, services, data, marketplaces) - Website vs. an application - where is the line drawn? - What happens behind the scenes when we click the "Buy" button - Explain the class presentation structure. Students will suggest a list of topics and self organize into groups |         |             |
| 2    | Major differences between mom'n'pop and enterprise websites - How do we grow a website? Scalability - Maintainability - Risk management and fail-over - Disaster Recovery and planning - Licensing and Cost of ownership - Hosting and vendor management - Hosting and vendor management Cont'd - Call center and customer support - Order management system   |         |             |
| 3    | - Warehouse management system - Tying everything together: Enterprise Architecture - Enterprise Application Integrations, ESB - Technology Selection (Java/.NET/PHP/Ruby-on-rails) - Web 2.0 (flash/ajax) - CDN, Akamai - Community - Ratings & reviews - Cross-selling and recommendations - Click-to-call - Click-to-chat - mCommerce  |         |             |
| 4    | - Multi-channel selling and brand consistency - Data consistency and single customer view - Special orders / Drop ship - Email campaign management and CAN-SPAN - Traffic sources - Shopping engines - Affiliates - Amazon - Paid Search - Alternative checkout - Paypal - Bill me later - Google checkout - Measuring and reporting performance of different sources  |         |             |
| 5    | - Business Process - Merchandising & Stock position - Advertising - Long tailing and endless Isle - Promotional engines - Couponing and  |         |             |

| <b>Week</b> | <b>Topics Covered</b>  | <b>Reading</b> | <b>Assignments</b> |
|-------------|--|----------------|--------------------|
|             | offer abuse - Free shipping - Seasonality - Direct Marketing and marketing strategy - Upsell, cross-sell, out-of-stock, product bundles, and substitution - Reporting: Conversion & AOV - Google Analytics - Student presentations: Q&A  |                |                    |
| 6           | Students presentations on the topics of choice (agreed on in class 1)  |                |                    |
| 7           | - Fraud - Types of fraud - Credit cards: Address verification and standardization, AVS and CVN, debit cards - Credit cards: Payment processing, preauth, settling - Payment gateway - Communicating security and good track record (BBB, Hackersafe, SSL) - Processing returns - A little bit on A/B testing |                |                    |
| 8           | - Search - Site search, filtering, refinements, faceting - Search Engine Optimization - Paid Search - Search Reporting - Search Tuning   |                |                    |
| 9           | Guest Lecturer: Building a successful eCommerce business from ground up Guest Lecturer: Managing eCommerce Marketing for a large enterprise  |                |                    |
| 10          | - Usability - User Interface: Don't make me think - What customer say they want vs. what they really want: surveys and focus groups - Build vs. buy - Software as a service vs. hosted   |                |                    |
| 11          | - Management - Change Management - Release management - New features, bugs, and roadmap process - Virtue of templating and reusability - Capabilities vs. make-it-work and just-do-it - Team structure - Creating YOUR process - Value of SOP  |                |                    |
| 12          | - SCRUM Agile methodology primer   | SCRUM book     |                    |
| 13          | - Each students will present their website project   |                |                    |
| 14          | - Legal issues and regulations - Privacy & security - PCI/SOX compliance & credit card numbers - Taxation - Outsourcing - Types - Why/why not - What can you outsource, how, when, and to whom - Case Study - Review for the final exam  |                |                    |