

# ***MET CS 701 -- Rich Internet Application Development***

## ***Instructor***

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## ***Course Description***

The Rich Internet Application (RIA) Development course concentrates primarily on building rich client web applications in the browser for desktop and mobile devices. The course is divided into various modules covering in depth the following technologies: HTML5, jQuery UI & Mobile, and Flex/ActionScript. Along with the fundamentals underlying these technologies, several applications will be showcased as case studies. Students work with these technologies starting with simple applications and then examining real world complex applications. At the end of this course, students would have mastered the latest and widely used RIA methodologies.

## ***Course Prerequisites***

**CS520** (*Information Structures*) and/or **CS601** (*Web Application Development*)

## ***Course Grading Policy***

The course grade will be based on active class participation and discussions (10%), programming assignments (30%), proctored final exam (30%), and a term project (30%). Assignments are expected to be submitted by their respective due dates. Late submissions carry a penalty.

## ***Course Web Site***

<http://onlinecampus.bu.edu/>

## ***On the Web***

- [HTML5 Rocks](#)
- [jQuery Mobile Framework](#)
- [Adobe Flex](#)

## ***References***

- *"Pro HTML5 Programming, 2nd edition"*, by Peter Lubbers, Brian Albers, and Frank Salim, APress, 2011. ISBN13: 978-1-4302-3864-5. **(Reference book)**
- *"Head First HTML5 Programming, Building Web Apps with JavaScript"*, Eric Freeman and Elisabeth Robson, O'Reilly, 2011. ISBN 13: 978-1-4493-9054-9. **(Reference book)**
- *"jQuery UI"*, by Eric Sarrion, O'Reilly, 2012.

ISBN 13: 978-1-449-31699-0 (**Reference book**)

- *"jQuery Mobile: Up and Running"*, by Maximiliano Firtman, O'Reilly, 2012.

ISBN 13: 978-1-449-39765-4.(**Reference book**)

- *"Adobe Flex 4.5 Fundamentals: Training from the Source"*, by Labriola, M. and Tapper, J., Adobe Press, 2011.

ISBN 13: 978-0-321-77712-6 (**Reference book**)

- *"Flex Mobile in Action"*, by Jonathan Campos, Manning Publications, 2012.

ISBN 13: 9781617290619 (**Reference book**)

- *Various online resources*

*Student Conduct Code*

[Please review the academic conduct code](#)

*Tentative Course Schedule*

<b>Module 1 (HTML5, Part1)</b>	
-- Overview of HTML5 -- Canvas and Scalable Vector Graphics -- Audio and Video	Week 1
<b>Module 2 (HTML5, Part2)</b>	
-- Geolocation -- Communication -- Web Sockets -- Forms	Week 2
<b>Module 3 (HTML5, Part3)</b>	
-- Drag and Drop -- Web Workers -- Web Storage -- Offline Web Applications	Week 3
<b>Module 4 (jQuery UI)</b>	
-- jQuery Review -- Controls -- Drag and Drop	Week 4
<b>Module 5 (jQuery Mobile)</b>	
-- Navigation -- Form Elements and Lists -- Views -- Server Integration Techniques	Week 5
<b>Module 6 (Flex)</b>	
-- Flex Programming elements -- MXML, Events, Data Access -- User Interface Components -- Flex Mobile	Week 6
<b>Project Presentations</b>	
<b>Proctored Final Exam</b>	