

## WEB APPLICATIONS DEVELOPMENT

IFSA-Butler Reimagining Europe Semester Program in Prague

**Suggested US semester credit hours:** 4 credits

**Contact Hours:** 60

**Course Level:** 300

**Course length:** Semester

**Delivery method:** Face to face

**Language of Instruction:** English

### COURSE DESCRIPTION

The aim of the course is to enable students to understand the concepts of web applications and apply the skills to develop and test web applications using server-side technologies. Students should already be familiar with website design and management, and will be able to apply their own web development skills to this module. Students will enjoy extending their web-development skills by understanding the concepts of web-based applications using server-side technologies. This course takes client-side web-development one step further by introducing server-side application development. This course focuses on server-side technologies and how server-side scripting can be used to create sophisticated web-based applications. Students will develop skills in specific techniques and also able to select when and where they are most appropriate, basing this decision on client and user needs. They will also ensure that their applications comply with the relevant legislation and guidelines.

### STUDENT LEARNING OBJECTIVES

Students who successfully complete this course will:

- Understand the concepts of web application development
- Be able to design web applications
- Be able to implement web applications
- Be able to test web applications
- Strengthen critical thinking skills
- Become familiar with resources available for further research on web applications development
- Make cognitive connections between learning in this course and other learning experiences in the IFSA-Butler Reimagining Europe Semester Program in Prague

## COURSE DELIVERY

Students are expected to read or view resources in advance and be prepared to actively discuss them in class. In each meeting, the instructor will overview the topic and then facilitate a group discussion, drawing out relevant themes, following up on specific lines of inquiry, and prompting students' thoughtful engagement with the topic. Students are encouraged to bring their prior learning experiences into class discussions and to make cognitive connections between this course and others in the IFSA-Butler Reimagining Europe Semester Program in Prague whenever possible. Theories of experiential learning and integrative learning therefore undergird the dynamic learning environment of this course.

This course utilizes an interactive approach to teaching that focuses on the individual student's needs. This approach to teaching and learning aims to foster a challenging but caring environment that allows students to explore, create, and test themselves and their ideas in a safe place.

## COURSE SCHEDULE

<b>15 weeks</b>	<b>Content Delivery</b>
1	Introduction
2-3	Tools
4	Assignment Briefs
5	POST and GET Requests
6	Connect PHP to MySQL
7-8	Using PHP Sessions
9-10	Jquery AJAX
11-15	Tutorial Project

## EVALUATION METHODS

The course instructor will determine specific assignments (including paper topics), projects, and exams for the course. Your work on individual assignments and projects will be guided by grading rubrics provided by the course instructor. Your final grade in the course will be arrived at through assessment methods determined by the course instructor and according to the percentages attached to each assignment and exam by the course instructor. Participation will constitute a determined percentage of your grade. Participation includes attendance, preparation, engagement in discussion, civility, and respect.

Assignment Number	Type of Assignment	Description and Areas Assessed
1	Research report	State of Web Apps
2	Design of web application	Design a Web App
3	Building a web application Technical report	Build and test a Web App

### **Timely Submissions**

Assignments submitted after the deadline will be accepted at the discretion of the course instructor and generally only in the event of a documented illness or emergency.

### READING LIST

Hurwitz D, MacDonald B – *Learning ASP.NET 3.5* (O'Reilly Media, 2008) 978-0596518455

Nixon R – *Learning PHP, MySQL, and JavaScript* (O'Reilly Media, 2009) 978-0-596-15713-5

Parsons D – *Dynamic Web Application Development Using XML and Java* (Thompson Learning, 2008) ISBN-10: 1844805417

Schwartz R et al – *Learning Perl* (O'Reilly Media, 2008) ISBN-10: 0596520107

Stobart R – *Dynamic Web Application Development Using PHP and MySQL* (Thompson Learning, 2008) ISBN-10: 1844807533

### ACADEMIC INTEGRITY

Any academic endeavor must be based upon a foundation of honesty and integrity. Students are expected to abide by principles of academic integrity and must be willing to bear individual responsibility for their work while studying abroad. Any academic work (written or otherwise) submitted to fulfill an academic requirement must represent a student's original work. Any act of academic misconduct, such as cheating, fabrication, forgery, plagiarism, or facilitating academic dishonesty, will subject a student to disciplinary action.

IFSA-Butler takes academic integrity very seriously. Students must not accept outside assistance without permission from the instructor. Additionally, students must document all sources according to the instructions of the professor. Should your instructor suspect you of plagiarism, cheating, or other forms of academic dishonesty, you may receive a failing grade for the course and disciplinary action may result. The incident will be reported to the IFSA-Butler resident director as well as your home institution.