Syllabus

Revised January 16, 2018

Logistics

Section 001  Bernardo Darquea  OnLine

Faculty and Staff

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Course Description

IT  Information Technology
332 Web Server Administration  Prerequisite: IT 213

Covers the installation, configuration, and administration of Web servers, mail servers, FTP servers, and directory services; related security setups and administration and associated performance issues are also covered.

From http://www.gmu.edu/catalog/courses/it.html

Prerequisites
The prerequisite for this course is IT 213 (or an approved equivalent course). A grade of "C" or better must be achieved in the prerequisite course before a student is qualified to take this course. The prerequisite course must be completed prior to, not concurrently with, this course.

This requirement will be strictly enforced. Any student who does not meet the prerequisite requirement will be dropped from the course by the Instructor at the start of the semester and the student will be responsible for any consequences of being dropped.

**Rationale**

Web servers are a fact of life in today’s high tech world. Just about everyone depends on them for their day to day lives. This class covers administration of web servers and their security. Web server applications (such as email servers) along with server technologies will be covered in this course.

**Course Outcomes**

On successful completion of this course, students will be able to:

- Understand a web server’s functionality
- Install and configure IIS and Apache
- Install and configure Exchange mail server
- Work with, understand, and configure DNS functionality
- Secure a web server and its websites

**Supported Student Outcomes at the Program Level**

- (i) An ability to use current techniques, skills, and tools necessary for computing practice

**Major Topics**

- IIS Server
- Apache Server
- DNS
- Active Directory
- FTP
- Security
Textbooks


Grading

Grades will be awarded in accordance with the GMU Grading System for undergraduate students. See [http://www.gmu.edu/catalog/apolicies/](http://www.gmu.edu/catalog/apolicies/) under Grading System for more information.

*Letter grades will be assigned according to the following scale:*

<table>
<thead>
<tr>
<th>Numeric Score</th>
<th>Letter Grade</th>
<th>Grade</th>
</tr>
</thead>
<tbody>
<tr>
<td>97 – 100</td>
<td>A+</td>
<td>Passing</td>
</tr>
<tr>
<td>93 – 96</td>
<td>A</td>
<td>Passing</td>
</tr>
<tr>
<td>90 – 92</td>
<td>A–</td>
<td>Passing</td>
</tr>
<tr>
<td>87 – 89</td>
<td>B+</td>
<td>Passing</td>
</tr>
<tr>
<td>83 – 86</td>
<td>B</td>
<td>Passing</td>
</tr>
<tr>
<td>80 – 82</td>
<td>B–</td>
<td>Passing</td>
</tr>
<tr>
<td>77 – 79</td>
<td>C+</td>
<td>Passing</td>
</tr>
<tr>
<td>73 – 76</td>
<td>C</td>
<td>Passing</td>
</tr>
<tr>
<td>70 – 72</td>
<td>C-</td>
<td>Passing*</td>
</tr>
<tr>
<td>60 – 69</td>
<td>D</td>
<td>Passing*</td>
</tr>
<tr>
<td>0 – 59</td>
<td>F</td>
<td>Failing</td>
</tr>
</tbody>
</table>

* Grades of "C-" and "D" are considered passing grades for undergraduate courses. However, a minimum grade of "C" is required in the BSIT program for any course that is a prerequisite for one or more other courses. This course is a prerequisite for several courses in BSIT Concentrations – see [http://www.gmu.edu/catalog/courses/it.html](http://www.gmu.edu/catalog/courses/it.html) for more information on those courses.

*Final grades will be determined based on the following components:*
<table>
<thead>
<tr>
<th>Quizzes</th>
<th>20% (2 quizzes)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Project</td>
<td>30%</td>
</tr>
<tr>
<td>Lab Assignments</td>
<td>30%</td>
</tr>
<tr>
<td>Midterm Exam</td>
<td>10%</td>
</tr>
<tr>
<td>Final Exam</td>
<td>10%</td>
</tr>
</tbody>
</table>

**Final Project includes:**

Each student individually will prepare and submit a project in accordance with requirements to be discussed in class and published on the Blackboard Learning System. Late projects may not be accepted. -if accepted, a penalty may be applied. Acceptance of late projects and/or application of penalties will be at the sole discretion of the Instructor.

**Lab Assignments:**

Students are required to complete lab assignments in this course. For lab schedule and due dates, check the Lab section on Blackboard. The lab exercises will help you practice development skills and prepare for the projects. Lab assignments are always due at 11:00PM on the 6th day from the class in which the assignment is given. **Late submission will not be accepted.**

**Schedule**

<table>
<thead>
<tr>
<th>Week</th>
<th>Content</th>
<th>Chapter</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Intro to the course</td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>The Basics of Server and Web Server Administration</td>
<td>1</td>
</tr>
<tr>
<td>3</td>
<td>Preparing for Server Installation</td>
<td>2</td>
</tr>
<tr>
<td>4</td>
<td>Installing the Server</td>
<td>3</td>
</tr>
<tr>
<td>5</td>
<td>Name Resolution</td>
<td>4</td>
</tr>
<tr>
<td>6</td>
<td>Managing a Server</td>
<td>5</td>
</tr>
<tr>
<td>7</td>
<td>Configuring a Web Server</td>
<td>6</td>
</tr>
<tr>
<td>8</td>
<td>Midterm</td>
<td>Midterm</td>
</tr>
<tr>
<td>9</td>
<td>Installing and Testing a Programming Environment</td>
<td>7</td>
</tr>
<tr>
<td>10</td>
<td>Providing E-Mail Services</td>
<td>8</td>
</tr>
<tr>
<td>11</td>
<td>Extending the Web Environment</td>
<td>9</td>
</tr>
<tr>
<td>12</td>
<td>Securing the Web Environment</td>
<td>10</td>
</tr>
<tr>
<td>13</td>
<td>Monitoring and Analyzing the Web Environment</td>
<td>11</td>
</tr>
<tr>
<td>15</td>
<td>Final Exam</td>
<td></td>
</tr>
</tbody>
</table>
Final Project Due

This schedule is subject to revision before and throughout the course. Registered students should see the Blackboard Learning System for the latest class schedule.

See http://registrar.gmu.edu/calendars for more information.

Religious Holidays

A list of religious holidays is available on the University Life Calendar page. Any student whose religious observance conflicts with a scheduled course activity must contact the Instructor at least 2 weeks in advance of the conflict date in order to make alternative arrangements.

Attendance Policy

Students are expected to attend each class, to complete any required preparatory work and to participate actively in lectures, discussions and exercises. As members of the academic community, all students are expected to contribute regardless of their proficiency with the subject matter.

Students are expected to make prior arrangements with Instructor if they know in advance that they will miss any class and to consult with the Instructor as soon as possible if they miss any class without prior notice. Students who anticipate absences are discouraged from taking the class.

Departmental policy requires students to take exams at the scheduled time and place, unless there are truly compelling circumstances supported by appropriate documentation. Except in such circumstances, failure to attend a scheduled exam will result in a score of zero (0) for that exam, in accordance with Mason policy on final exams. Students should not make travel plans or other discretionary arrangements that conflict with scheduled classes and/or exams. If the University is closed due to weather or other unforeseen conditions, final exams may be rescheduled. Contact the instructor in advance if you have a serious problem that prevents you from meeting course requirements.

Classroom conduct

Students are expected to conduct themselves in a manner that is conducive to learning, as directed by the Instructor. Any student who negatively impacts the opportunity for other students to learn will be warned – if disruptive behavior continues, the student will be asked to leave the classroom.

Communications

Registered students will be given access to a section of the Blackboard Learning System for this course. Blackboard will used as the primary mechanism (outside of lectures) to disseminate course information, including announcements, lecture slides, homework and other assignments, and scores for homework and exams.

Communication with the Instructor on issues relating to the individual student should be conducted using GMU email, via telephone, or in person - not in the public forums on Blackboard. Email is the preferred method. Federal privacy law and GMU policy require that any communication with a student related in any way to a student’s status be conducted using secure GMU systems – if you use
email to communicate with the Instructor you **MUST** send messages from your GMU email account.

All course materials (lecture slides, assignment specifications, *etc*) are published on Blackboard. This allows users of most computing platforms to view and print these files. Microsoft® Word (or a compatible word processing application) is required for preparing assignments – it is available on computers in the Mason open labs.

**Privacy**

Instructors respect and protect the privacy of information related to individual students. As described above, issues relating to an individual student will discussed via email, telephone or in person. Instructors will not discuss issues relating to an individual student with other students (or anyone without a need to know) without prior permission of the student.

Assessable work other than final exams will be returned to individual students directly by the Instructor (or by a faculty or staff member or a Teaching Assistant designated by the Instructor, or via another secure method). Under no circumstances will a student's graded work be returned to another student. Faculty and staff will take care to protect the privacy of each student's scores and grades.

**Disability Accommodations**

The Office of Disability Services (ODS) works with disabled students to arrange for appropriate accommodations to ensure equal access to university services. Any student with a disability of any kind is strongly encouraged to register with ODS as soon as possible and take advantage of the services offered.

Accommodations for disabled students **must** be made in advance – ODS cannot assist students retroactively, and at least one week's notice is required for special accommodations related to exams. Any student who needs accommodation should contact the Instructor during the first week of the semester so the sufficient time is allowed to make arrangements.

**Honor Code**

All members of the Mason community are expected to uphold the principles of scholarly ethics. Similarly, graduating students are bound by the ethical requirements of the professional communities they join. The ethics requirements for some of the communities relevant to Applied IT graduates are available via the following links:

- [ACM Code of Ethics and Professional Conduct](#)
- [IEEE Code of Ethics](#)
- [EC-Council Code of Ethics](#)

On admission to Mason, students agree to comply with the requirements of the [Honor Code](#) at George Mason University. Student members of the George Mason University community pledge not to **cheat, plagiarize, steal, and/or lie** in matters related to academic work. The Honor Code will be strictly enforced in this course.

Any use of the words or ideas of another person(s), without explicit attribution that clearly identifies
the material used and its source in an appropriate manner, is plagiarism and will not be tolerated. The Instructor reserves the right to use manual and/or automated means (including such services as Turnitin.com) to detect plagiarism in any work submitted by students for this course, and to direct Teaching Assistants and/or other faculty and/or staff members to do likewise in support of this course.

**WARNING!** This course has a zero tolerance policy for violations of the Honor Code. There are no second chances. Offenses carry the following minimum recommended sanctions:

**Level 1 Offenses, such as cheating on an assignment (working together when not allowed)**
1\(^{st}\) Offense: 0 on the assignment, one letter grade (10%) reduction in the final grade, and the academic integrity seminar
2\(^{nd}\) Offense: F in the course, and one semester academic suspension
3\(^{rd}\) Offense: F in the course and expulsion from the University

**Level 2 Offenses, such as cheating on an exam, posting to a website for a partial or completed solution to an assignment (chegg.com, homeworkmarket.com, rentacoder.com, etc.)**
1\(^{st}\) Offense: F in the course and the academic integrity seminar
2\(^{nd}\) Offense: F in the course, and one year academic suspension
3\(^{rd}\) Offense: F in the course and expulsion from the University

For this course, the following requirements are specified:

- All assessable work is to be prepared by the individual student, unless the Instructor explicitly directs otherwise.
- All work must be newly created by the individual student for this course for this semester. Any usage of work developed for another course, or for this course in a prior semester, is strictly prohibited without prior approval from the instructor.