BIS 555
Web Administration
Fall 2002

Section 64221
(Henceforth 385A)
W 1800 - 2030 hrs.
Room 1135
Room 2270 (CIS Lab)

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MW 1200 -1330 hrs.
F 1000-1200 hrs.

Virtual Office Hours
Asynchronous: By Email
and Discussion List

Synchronous: As needed via ICQ

Either WMU or Virtual
Also available by appointment

Course Site: http://homepages.wmich.edu/~rea/555

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The **Haworth College of Business** is dedicated to provide excellent targeted graduate education and seminars for constituent groups by the year 2004.

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**Prerequisites**

- BIS 360
- Students taking this course should have access to a computer on which they can install and run a Web server and related technology.

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**Course Description**

This course explores the knowledge and skills necessary to design, deploy, administer, and maintain effective Web systems in various business contexts. Students will learn how to effectively integrate Web systems to meet business needs through readings, discussions, and hands-on exercises.

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**Course Format**

About one-half of the class time will be spent in lecture and discussion that will be heavily supplemented and extended via electronic communication (e-mail, discussion list, and Virtual Office hours). All remaining time will be spent in the Computer Classroom devoted to the "hands-on" application of current technologies in labs and projects.

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**Course Objectives**

**After taking this course, students should be able to:**

- Plan, deploy, configure, and maintain Web servers in a business environment.
- Understand Network and Internet protocols.
- Implement server-side scripting languages to manage Web servers and provide Web functionality.
- Explore technologies to provide secure transactions.
- Understand and implement Web server security and controls.
- Detect and recover from Web server attacks.
Required Materials

- Access to a computer system on which you can install Linux (preferably Red Hat 7.3) and Apache. We might also install various other technologies, modules, and programs. **Please note:** You can dual boot an existing Windows system.
- UNIX Class Account (you must obtain)
- A form of media storage: You can use:
  - 100MB Zip Disk
  - CD-RW
  - your UNIX account (will need to FTP into a directory)
  - 3.5 Disks (some items may not fit on one disk though)
- Access to a computer with Internet access and an FTP program.
- Access to IE 6.x, Mozilla 1.x, and various other Web Browsers
- World Wide Web Materials (much will be online in this course)
- Access to [http://webct.wmich.edu](http://webct.wmich.edu) for various items.
- ICQ (If you want to use synchronous Virtual Office hours.) ([http://www.icq.com](http://www.icq.com))
- Supplemental Materials, such as library reserve and Web sites (provided by Instructor).

Recommended Materials

- There will be many recommended sources (text and Web) suggested throughout the course for your benefit.

Course Endeavors

A Little about the Course

The World Wide Web (as most people know it) has only been around since the mid-1990s. But since the introduction of the graphical user interface in Web Browsers, the Web has grown at a tremendous rate.

To support this growth, the number of Web servers must also increase. Some experts argue that the number of Web servers doubles every 53 days. This rate has probably
slowed somewhat since 2000, but there’s still a need for new Web servers and an abundance of existing Web servers that need maintenance.

In this course, you’ll learn how to design, deploy, administer, and maintain Web servers. While there are certain items we need to cover, this course allows you to bring up issues that most interest you as well. Internet technology changes fast and I’m sure there are items I haven’t even thought of that will become the next "hot thing" during the semester. I’m counting on you for input as well. We will get much out of this course if we work together.

**Labs (300 points)**

Points for labs will vary according to the time allotted and the depth of each lab. For example, a lab setting up a Web server will count for fewer points than a lab designing an advanced Web server application because of the time and difficulty involved. Labs and due dates will be posted on the [Course Website](#).

**Exams (200 points)**

An evaluation of what you have learned in the semester.

**Knowledge Forays and In-Class Exercises (100 points)**

Throughout the semester, brief unplanned knowledge forays and exercises will be planned to measure your skill and knowledge base. You must be present to partake of them. These cannot be made up in any case (even a pre-excused absence), but more than the allotted number will be given so you can make the 100 points. If you are present and do well on all of them, any amount over the 100 points will be considered extra credit.

**Technology Exploration (Presentation and Paper [100 points])**

During the course, a student team (2 or 3 people depending on class size) will prepare and present a Technology Exploration. The exploration will focus on the subject of the week and is intended to promote discussions in the class. The team will provide the class with a presentation (10 – 15 minutes) using PowerPoint and other visual aids. While a professional presentation is important, we are more concerned with the interaction and discussion of the issues brought forth in the exploration. **Make sure to have questions prepared to stimulate discussion.**

The team will be responsible to provide the class with:

1. The PowerPoint slides (given to me for upload)
2. A resource sheet (one print version to class and one electronic for me to post)

This exploration will be supported with a written paper (digital to me) that explores the concept presented in class. This paper should put forth an argument and support it.
For example, instead of just discussing the various Web servers, the paper would discuss the various Web servers and argue that a business should use one over another for certain reasons.

Students will need to sign up for a class session. The number of students will determine how often and how many explorations per meeting.

For the written portion of the Technology Exploration (e-mailed within 24 hours after the class session), please use the following guidelines:

- The paper should be about 1250 words (not including references).
- The paper should include an executive summary.
- Make sure to use APA documentation.

Please note: Only one graduate student per each team.

Project (300 points)

Graduate students: This project is an individual endeavor for you.

Undergraduate students: This is a team project with 2 people on a team.

We will work on this project throughout the semester and turn in progress checks to keep us on track. The bulk of the project is not due until near the end of the course when you’ll present the project. Part of the team project grade will be a team member assessment. We will talk about the entire project in great detail as the semester progresses, but for now realize that this project will be a real-world application or system implementation of what you have learned throughout the entire semester. More details are on the Course Website.

Extra Credit

There is no guarantee of extra credit assignments in this course. If extra credit is offered, it’s offered to the entire class. Each individual may choose to complete the extra credit assignment or not.

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General Information

Assignments

Unless otherwise noted, all work needs to be your own. This is not to say you cannot ask questions, discuss concepts, etc. with one another and over the discussion list (in fact it’s encouraged), but the final product must be your own work.
Due Dates

Labs

Due dates are firm. All labs are due on the due date and time. This allows for fair grading and equal treatment for all students in the course.

Because life itself is an uncertain proposition, you might have some difficulty during the semester. Therefore, you will be allowed ONE (1) late lab. This lab can be turned in 7 days after the due date. (Some restrictions apply.)

This offer will be available to you only ONE (1) time during the semester and I encourage you to save it for an emergency situation. System failure, no backup disk, computer virus, being too busy, and other such excuses are not acceptable. As in the real world, you are responsible to make sure you are prepared. Please inform me via e-mail that you have taken your ONE within 24 hours after the due date and time.

Notify me via e-mail within 24 hours after the due date if you intend to use your ONE (1) late lab.

Knowledge Forays and In-Class Exercises

Knowledge forays and in-class exercises cannot be made up in any situation (even pre-excused absences), but more than the allotted number of points will be offered during the semester. (See above under “Course Endeavors”)

Exploration and Project Deliverables

Working as part of a team can be both an exhilarating and frustrating experience. Good communication and coordination will go far in your team’s overall success. While meeting individual deadlines can be trying at times, meeting team deadlines can be even more challenging.

Please note that late team deliverables without prior approval will not be accepted and therefore not evaluated. Finally, if I do approve a late deliverable, it will not receive full credit. Approved late assignments will have 20% of the possible score deducted for each day late. Deliverables more than (2) days late will not be accepted.

Exams

You are required to take the exams on the assigned day. Please check the course site for these dates.

Missed exams may only be handled with a documented excuse. A documented excuse consists of a letterhead from a medical doctor. This letter must include the statement “I have advised the student to stay home on the following dates: [DATES], for medical
reasons. Other documentation will not be considered. Documentation not on letterhead will not be considered. Documentation that does not contain the statement above will not be considered.

If you must miss an exam due to university-sponsored event, documentation to this effect must be presented IN ADVANCE of the exam date. Anyone who has not received a WRITTEN notice from me concerning missing an exam in advance will not be allowed to receive credit for that exam.

Scheduled Work

This class requires you to work on numerous labs and make progress reports throughout the semester. To be successful, it is important for you to keep up with the schedule and check it frequently. While the instructor reserves the right to make changes as the semester progresses, we will always discuss and agree to major changes in the schedule.

Amount of Work

This class will place great demands on your time OUTSIDE OF CLASS. You will need to be able to access a computer system and have time in your schedule for labs, team meetings, and completing other assignments. This is all in addition to completing the readings and making sure that you understand and can apply concepts and theories. For example, depending on the lab and your skill level, some labs might take up to 20-25 hours to complete.

Turning in Work

Electronic nature of our work: Almost all of our class work is digital in nature. Resisting the temptation to "change one last item" after a deadline has passed will be paramount to your success. If you change an item (no matter how small) after the due date and time AND before you receive your evaluation, it’s considered late.

Do your own work. Do not work on an entire assignment step-by-step with other students (unless directed by the instructor). Identical errors or copying in any work will result in a grade of zero for all involved parties.

Do not copy code. Anyone found copying code will receive an automatic zero for the work no matter how small the copying instance. Continued copying will result in harsher penalties. (See Academic Integrity below.)

Finally, all students are treated equally and fairly. There will be no make-up work or extra projects for any individual student.
Attendance

Sessions are premised on your presence. Sessions include information far beyond that found in the texts. Therefore, I expect you to be here. A pattern of absences, tardiness and/or leaving early will have an impact on your grade.

**Remember, if you miss a class you are still responsible for any material and class work that you miss.** I encourage each of you to form class contacts to learn of items missed.

Ultimately, the class needs you here, and you need to be here. There is no way to duplicate class instruction and discussion. Missing classes can result in serious problems that show up in your assignments. Finally, although there are no guarantees, we will have fun every once in awhile (believe it or not).

Participation

To participate, you must be present and pay attention to the class task or discussion. Class comments are assessed on quality, not quantity—to a point. Teamwork will be part of your work in this class. Those who work well in teams are people who follow directions, contribute to the work of the team, stay with the assigned task, and complete it effectively in the time allotted.

Respect and Intellectual Freedom

Many opportunities for debate and discussion abound in this course. You also will have many opportunities to work with classmates who espouse different views and opinions. While we can always discuss ideas and issues openly, we must also respect one another as human beings.

Creative Freedom

You will have many opportunities to express your design skills and creative impulses throughout this course. However, please be aware that while the most leeway possible will be provided, the instructor reserves the right to restrict some applications and developments if these are counter-productive to the business community at large.

Responsibility

You are, of course, responsible for your individual work in this class. However, when you are working on a team project, you are also responsible to others as well and need to do your share.
Academic Integrity

You are responsible for making yourself aware of and understanding the policies and procedures in the Undergraduate (pp. 268-270) [Graduate (pp. 24-26)] Catalog that pertain to Academic Integrity. These policies include cheating, fabrication, falsification and forgery, multiple submission, plagiarism, complicity and computer misuse. If there is reason to believe you have been involved in academic dishonesty, you will be referred to the Office of Student Judicial Affairs. You will be given the opportunity to review the charge(s). If you believe you are not responsible, you will have the opportunity for a hearing. You should consult with me if you are uncertain about an issue of academic honesty prior to the submission of an assignment or test.

Also please note the University's policy on computer misuse: "Computer misuse is disruptive or illegal use of computer resources." Any evidence of academic dishonesty may be pursued by the instructor. This code can be found at http://www.wmich.edu/docs/docs/services/rules_comp_resources.html

Communication

Course Website and Class E-mail Account

You are responsible for reading the postings and announcements on the Course Website, the discussion list, and on your class e-mail account. You should also check the Course Website for resources, schedule updates, special instructions on assignments, etc. Keeping up to date with that material is almost as important as attending class.

Course Discussion List

The preferred means of electronic communication for this course. Use the discussion list to ask questions concerning the course work, pose ideas about technology, share useful Websites, etc. I will also post all announcements via the list.

To join the list, go to

http://docrea.net/mailman/listinfo/

and join the appropriate list. You will only be able to post to the discussion list from your subscribed account(s).
E-Mail

If you leave e-mail, in most cases you will have a response within 24 hours after I receive the e-mail.

*Use your UNIX e-mail for course correspondence other than the discussion list. If unable to use your UNIX account for some reason, please sign e-mail with your name and UNIX ID.*

Use the subject line to help me identify an e-mail is coming from this course. Putting BIS 555 at the beginning will help me sort my numerous daily e-mails and address yours. For example, you might use the following Subject line:

**Subject: BIS 555 – Where's the Widget Log?**

ICQ

I am on ICQ at various points throughout the day. Please feel free to contact me if I am available for chat. If I have marked that I’m not available, want privacy, or away, please respect that status.

Voice Mail

If you leave a voice mail message, begin by stating the day and time you are placing the call, and enunciate clearly. Provide enough information so that it is easy to understand the purpose of your call. If you wish your call returned, leave your number and the times you can be reached. Voice mail “turn-around” time is not guaranteed.

Problems

If you find yourself having trouble in this class, you are responsible for talking about the nature of your difficulty while there is still time left to do something about it.

Questions

If you have any questions about this syllabus or other class matters, please feel free to discuss these issues during office hours or at some mutually agreeable time, or e-mail or call.
Additional Information

You are responsible for keeping track of your assignments and progress in this course. Save all your graded assignments (including e-mail) so that you will have a complete record of your scores. Most assignments will be sent to your UNIX account. Keep a record of points awarded to the groups to which you are assigned, and make sure that someone in your team saves the document awarding the group points.

Your grades will be periodically posted. You are responsible for checking your grades and reporting (and proving) any errors in your record within one week of the posting.

You are responsible for knowing what happened in class, including changes in assignments or due dates, regardless of whether you attend. You are responsible for reading the textbook and for asking questions about material that you don't understand.

Grading

You will be evaluated based on diverse assignments throughout the semester to demonstrate not only your understanding of various concepts but also your proficiency in selected Web server technologies and applications. There will also be a final exam that tests your comprehension of these items.

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<tr>
<th>Category</th>
<th>Points</th>
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<tbody>
<tr>
<td>Labs</td>
<td>300</td>
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<tr>
<td>Exams</td>
<td>200</td>
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<tr>
<td>Forays and Exercises</td>
<td>100</td>
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<tr>
<td>Technology Exploration</td>
<td>100</td>
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<tr>
<td>Project</td>
<td>300</td>
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Final Grade

Final grades will be based on accumulated points:

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<tr>
<th>Final Point Scale</th>
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<tbody>
<tr>
<td>A = 940-1000</td>
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<tr>
<td>BA = 880-939</td>
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<tr>
<td>B = 820-879</td>
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<tr>
<td>CB = 760-819</td>
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<tr>
<td>C = 700-759</td>
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<tr>
<td>DC = 650-699</td>
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<td>D = 600-649</td>
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<td>E = Below 600</td>
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Incomplete Policy

This is a temporary grade which the instructor may give to a student when illness, necessary absence, or other reasons beyond the control of the student prevent completion of course requirements by the end of the semester or session.

This grade may not be given as a substitute for a failing grade.

A grade of "I" must be removed by the instructor who gave it or, in exceptional circumstances, by the department chairperson. If the unfinished work is not completed and the "I" grade removed within one calendar year of the assignment of the "I," the grade shall be converted to an "E" (failure). Students who receive an incomplete grade in a course must not reregister for the course in order to remove the "I."