## CIS 3287 Software Design/Practicum

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<tr>
<th><strong>Course</strong></th>
<th>CIS3287</th>
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<tbody>
<tr>
<td><strong>Course Title</strong></td>
<td>Software Design/Practicum</td>
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<tr>
<td><strong>Time</strong></td>
<td>W 2:00-2:50 F 1:00 – 2:50 M 1:00-2:50</td>
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<td><strong>Place</strong></td>
<td>WF TL 403B M CC 200</td>
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<tr>
<td><strong>Instructor</strong></td>
<td>Paul Wolfgang</td>
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<td><strong>Instructor Phone</strong></td>
<td>215-204-5155</td>
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<td><strong>Office Hours</strong></td>
<td>MWF 3:00 – 4:00</td>
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<td><strong>Course Web Page</strong></td>
<td><a href="http://www.cis.temple.edu/~wolfgang">www.cis.temple.edu/~wolfgang</a></td>
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| **Prerequisites** | C or better in:  
CIS 2168 Data Structures  
CIS 3207 Introduction to System Programming and Operating Systems |
| **Textbooks** | Object-Oriented Design & Patterns  
Horstmann  
John Wiley & Sons.  
ISBN: 978-0-471-74487-0 |
|  | Beautiful Code ³  
Oram & Wilson  
O'Reilly  
ISBN: 978-0-596-51004-6 |
|  | Pragmatic Unit Testing in Java with JUnit  
Hunt & Thomas  
The Pragmatic Book Shelf  
ISBN: 978-09745140-1-7 |
|  | Head First Design Patterns ¹,³  
Freeman & Freeman  
O'Rielly  
ISBN: 978-0-596-00712-4 |
|  | Java Power Tools ¹,³  
Smart  
O'Reilly  
ISBN: 978-0-596-52793-8 |
|  | Version Control with Subversion ¹,²,³  
Pilato, Collins-Sussman, & Fitzpatrick  
O'Reilly  
ISBN: 978-0-596-51033-6 |

¹ Recommended Reference  
² Available on-line from http://svnbook.red-bean.com  
³ Available on-line through the Temple Library
Course Description: Provides direct experience in the design, development, documentation, testing and maintenance of medium size software projects, in the use of modern software problem solving abstractions and solution patterns, and in the use of software development environments. This course is the capstone of the programming course sequence.

Course Goals: To introduce the students to the following topics and to demonstrate their practical application.

- Graphic User Interface
- Access to Database
- Remote Procedure Calls (RPC)
- Extensible Markup Language (XML)
- Threading
- Object Oriented Design
- Unified Modeling Language (UML)
- Design Patterns
- Test Driven Development

To provide practical experience in using modern software development tools to perform the following tasks

- Project Management
- Version Control
- Build
- Test
- Issue Tracking

Provide experience working in small teams working on a project to modify an existing open-source program. Most Projects and code will start from or be inspired by:

- Sourceforge projects
- Apache Software Foundation projects
- Google Summer of Code

Grading:

- 10% Weekly test - Brief in class/lab tests to verify that students learn the material
- 20% Homework/Lab - Small assignments intended to make student practice with the concepts and tools presented
- 15% Midterm
- 30% Final Project - Six week long project done in small teams, using wiki to help grade individuals
- 25% Final Exam

Exam Dates:

- Midterm: Oct. 9
- Final: [Per University Exam Schedule]

Attendance Policy: Attendance is mandatory. Unexcused absence will result in reduction of final grade.
Other Important Information

Disability disclosure:
Any student who has a need for accommodation based on the impact of a disability should contact me privately to discuss the specific situation as soon as possible. Contact Disability Resources and Services at 215-204-1280 in 100 Ritter Annex to coordinate reasonable accommodations for students with documented disabilities. (Temple University Policy and Procedures Manual)

Academic freedom:
Freedom to teach and freedom to learn are inseparable facets of academic freedom. The University has a policy on Student and Faculty and Academic Rights and Responsibilities (Policy #03.70.02) which can be accessed through the following link: http://policies.temple.edu/getdoc.asp?policy_no=03.70.02.

Academic Honesty
Academic cheating (such as plagiarism, copying during an exam, copying homework, stealing files and passwords, etc.) is strictly prohibited in this course. The penalty for the first offense will normally be an F in the course. A subsequent offense (in this or any other course) may also be referred to the University Disciplinary Committee.

No collusion what-so-ever during an exam will be tolerated. In particular not talking or other sharing of information (for example during open book exams) is permitted. Keep your eyes on YOUR paper.

IGNORANCE OF ACCEPTABLE GUIDELINES OF CONDUCT IS NO EXCUSE

http://policies.temple.edu/getdoc.asp?policy_no=03.70.12

Dates to Remember
First Day of Class: Monday, August 31, 2009
Last Day to Drop: Monday, September 14, 2009
Last Day to Withdraw*: Monday, November 2, 2009
Thanksgiving Recess: Thursday, November 26 – Sunday, November 29
  Tuesday, November 24 follow Thursday class schedule
  Wednesday, November 25 follow Friday class schedule
Last Day of Class: Wednesday, December 9

* Students may withdraw from a course only once. Students may withdraw from a total of five courses.