CURRICULAR/PROGRAM CHANGE TRACKING DOCUMENT

ACADEMIC UNIT: Division of Computer Science

DATE SUBMITTED: February 21, 2013

1. BRIEF EXPLANATION OF PROPOSED CHANGE:

The following program changes are proposed:

- Information Security option in the Undergraduate degree in Computer Science is revised by creating 4 new courses and suspending 4 old courses
- A certificate in Information Security is proposed which will require a completion of 12 credit courses. All these courses are same as that in security option. This certification
- For Bachelor degree in Digital Gaming Entertainment and Simulation, catalog descriptions and contents of two courses DGE 300 & DGE 380, are revised
- DGE 300 is also added to the Gaming option
- Core requirements and Total required credits are reduced for both degrees and in each option for CS degree as follows:
  - Computer Science degree:
    - Math options - Core: 42, Credits: 120-122
    - Information Systems - Core: 42, Credits: 120
    - Information Security – Core: 42, Credits: 120
    - Gaming – Core: 42, Credits: 120
  - Digital GE:
    - Core: 42, Credits: 120

These proposed changes will make the program more competitive and attractive as our students will be better prepared for the industry and academia. These changes were made in line with the discussion with the advisory board. This will line our program with the requirements of our accreditation body ABET.

2. CHECK ITEM(S) BELOW FOR CHANGES DESIRED:

- [x] New Course(s)
- [x] Revised Course
- [x] Other (specify below): Revised Course Descriptions

I. Dean’s Action:

- [x] Approved
- [x] Disapproved
- [x] Returned for Recommended Change

Date: 3/25/13

Final Faculty senate Approved form as of 9/15/06

Kentucky State University is an equal educational and employment opportunity/affirmative action institution
II. Curriculum Committee Action:

☑ Approved  □ Disapproved  □ Returned for Recommended Change

Chairperson (signature): [Signature]  Date: 3-26-2013

III. Faculty Senate Action:

☑ Approved  □ Disapproved  □ Returned for Recommended Change

Senate President (signature): [Signature]  Date: 3-28-13

IV. Provost/Vice President Academic Affairs (not required for courses):

☑ Approved  □ Disapproved  □ Returned for Recommended Change

Provost/VPAA (signature): [Signature]  Date: 4/1/13

V. President's Action (not required for courses):

☑ Approved  □ Disapproved  □ Returned for Recommended Change

President (Signature): [Signature]  Date: 4/18/13
# BACHELOR OF SCIENCE IN COMPUTER SCIENCE 2013 - 2014

## COMPUTER INFORMATION SYSTEMS OPTION

**TOTAL HOURS 120**

### FRESHMAN YEAR

<table>
<thead>
<tr>
<th>FALL</th>
<th>HOURS</th>
<th>SPRING</th>
<th>HOURS</th>
</tr>
</thead>
<tbody>
<tr>
<td>ART 130 Introduction to Art OR</td>
<td>3</td>
<td>Social Science I*</td>
<td>3</td>
</tr>
<tr>
<td>MUS 130 Introduction to Music B OR</td>
<td></td>
<td>ENG 102 English Comp II</td>
<td>3</td>
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<tr>
<td>THE 130 Intro to Theater OR</td>
<td></td>
<td>MAT 125 Linear Algebra &amp; Differential Calculus</td>
<td>3</td>
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<tr>
<td>ENG 101 English Composition I</td>
<td>3</td>
<td>COS 107 Problem Solving &amp; Design</td>
<td>3</td>
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<tr>
<td>MAT 115 College Algebra</td>
<td>3</td>
<td>Natural Science*</td>
<td>3</td>
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<tr>
<td>UNV 102 KSU Orientation*</td>
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</tr>
<tr>
<td>Natural Science*</td>
<td>3</td>
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<tr>
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**TOTAL SEMESTER CREDIT HOURS 14**

### SOPHOMORE YEAR

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<tr>
<td>ACC 201 Principles of Accounting I</td>
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<td>COS 109 Principles of Computer Science II</td>
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<td>COS 108 Principles of Computer Science I</td>
<td>4</td>
<td>IGS 201 Convergence Tradition</td>
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<td>Social Science II*</td>
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<td>COS 200 Computer Information Systems</td>
<td>3</td>
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<tr>
<td>SPE 103 Interpersonal Communication</td>
<td>3</td>
<td>ENG 216 Technical Writing</td>
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<tr>
<td>COS 281 Intro to Information Security &amp; Assu</td>
<td>3</td>
<td>BUA 320 Business Statistics</td>
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**TOTAL SEMESTER CREDIT HOURS 16**

### JUNIOR YEAR

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<td>COS 275 Game Programming Foundation I</td>
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<td>COS 302 Operating Systems</td>
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<td>COS 301 Computer Organization</td>
<td>4</td>
<td>COS 340 Data Structures</td>
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<td>COS 300 System Design &amp; Development</td>
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<td>COS 410 Database Management Systems</td>
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<td>COS 310 Discrete Computing Structures</td>
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<td>ECO 321 Quantitative Methods</td>
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<td>Foreign Language</td>
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**TOTAL SEMESTER CREDIT HOURS 17**

### SENIOR YEAR

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<tr>
<td>COS 470 Networking &amp; Telecommunication</td>
<td>3</td>
<td>COS 464 Management of Computer Info Sys (new)</td>
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<td>COS 303 Human Perspective on Computer</td>
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<td>OR CIT 370 Info Tech Project Management</td>
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<td>COS 364 Data Storage and Data Mining</td>
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<td>OR MIS 300 Management of Information Sys</td>
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<tr>
<td>IGS 200 Ancient World</td>
<td>3</td>
<td>COS 494 Capstone Project</td>
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<td>COS 300/400 Elective</td>
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<td>COS 300/400 Elective</td>
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**TOTAL SEMESTER CREDIT HOURS 15**

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*ART 130, Recommended for CS Majors

*1 Social Science I & II: Either POS 101—American Government OR FIN 101—Financial Literacy OR HIS 103—Western Civilization,

*2 OR ECO 200—Survey of Economics OR PSY 200—General Psychology OR SOC 203—Principles of Sociology

*3 Natural Science: BIO 101 Life Science (3) OR CHE 109 General in Context

*4 BI 101 Life Science; OR BIO 103 Environmental Biology; OR BIO 112 Exploration of Modern Topics in Biology; OR

PHS 221 - Introduction to Astronomy; OR PHS 211 - Earth & Environmental Science; OR PH 221 Introduction to

Weather Studies; OR OR PHY 130 - Physics & Society; OR PHY 211 Physics 1. See your Advisor.

* See course catalog for UNV Requirements.

Note: This ladder is a planning tool used for advising only. It is not a binding document for the graduation requirement. See your advisor.
# BACHELOR OF SCIENCE IN COMPUTER SCIENCE 2013 - 2014
## MATHEMATICS OPTION
### TOTAL HOURS 120-122

### FRESHMAN YEAR

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<td>'ART 130 Introduction to Art OR MUS 130 Introduction to Music B OR THE 130 Intro to Theater OR ENG 101 English Composition I OR</td>
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<td>MAT 115 College Algebra</td>
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<td>COS 101 Programming in Visual BASIC</td>
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<td>UNV 102 KSU Orientation *</td>
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<td>Natural Science *</td>
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<td>SPE 103 Interpersonal Communication</td>
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### SOPHOMORE YEAR

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<td>MAT 131 Calculus I</td>
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<td>COS 109 Principles of Computer Science II</td>
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<td>COS 108 Principles of Computer Science I</td>
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<td>COS 200 Computer Information Systems</td>
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<td>ENG 216 Technical Writing</td>
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<td>COS 281 Intro to Information Security &amp; Assu</td>
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<td>MAT 132 Calculus II</td>
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### JUNIOR YEAR

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<td>COS 302 Operating Systems</td>
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<td>COS 300 System Design &amp; Development</td>
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<td>COS 340 Data Structures</td>
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### SENIOR YEAR

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<tr>
<td>IGS 200 Ancient World</td>
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<td>IGS 201 Convergence Tradition</td>
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<td>COS 470 Networking &amp; Telecommunication</td>
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<td>COS 410 Database Management Systems</td>
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<td>MAT 321 Probability &amp; Statistics</td>
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<td>CIS 494 Capstone Project</td>
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<td>COS/MAT 300/400 Elective</td>
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<td>COS 300/400 Elective</td>
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<td>COS 303 Human Perspective on Computer</td>
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* ART 130, Recommended for CS Majors  
1 Social Science I & II: Either POS 101 — American Government OR FIN 101 — Financial Literacy OR HIS 103 — Western Civilization; OR ECO 200 — Survey of Economics OR PSY 200 — General Psychology OR SOC 203 — Principles of Sociology  
2 Natural Science: BIO 101 Life Science (3) OR CHE 101 General Chemistry  
3 BIO 101 Life Science; OR BIO 103 Environmental Biology; OR BIO 112 Exploration of Modern Topics in Biology; OR PHS 211 — Introduction to Astronomy; OR PHS 211 — Earth & Environmental Science; OR PH 211 Introduction to Weather Studies; OR OR PHY 130 — Physics & Society; OR PHY 211 Physics I. See your advisor.  
4 See course catalog for UNV Requirements.  
Note: This ladder is a planning tool used for advising only. It is not a binding document for the graduation requirement. See your advisor.
### Bachelor of Science in Computer Science 2013-2014

#### Computer Information Security Option

**Total Hours: 120**

### Freshman Year

<table>
<thead>
<tr>
<th>Course</th>
<th>Fall Hours</th>
<th>Spring Hours</th>
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<tbody>
<tr>
<td>'ART 130 Introduction to Art OR</td>
<td>3</td>
<td>Social Science I*</td>
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<tr>
<td>MUS 130 Introduction to Music B OR</td>
<td></td>
<td>ENG 102 English Comp II</td>
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<tr>
<td>THE 130 Intro to Theater OR</td>
<td></td>
<td>MAT 175 Linear Algebra &amp; Differential Calculus</td>
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<td>ENG 101 English Composition I</td>
<td>3</td>
<td>COS 101 Programming in Visual BASIC</td>
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<tr>
<td>MAT 115 College Algebra</td>
<td>3</td>
<td>Natural Science*</td>
</tr>
<tr>
<td>UNV 102 KSU Orientation*</td>
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<tr>
<td>Natural Science*</td>
<td>3</td>
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<tr>
<td>Elective</td>
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<tr>
<td><strong>Total Semester Credit Hours</strong></td>
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<td><strong>Total Semester Credit Hours</strong></td>
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### Sophomore Year

<table>
<thead>
<tr>
<th>Course</th>
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<th>Spring Hours</th>
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<tbody>
<tr>
<td>COS 108 Principles of Computer Science I</td>
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<td>COS 109 Principles of Computer Science II</td>
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<td>Social Science II*</td>
<td>3</td>
<td>COS 200 Computer Information Systems</td>
</tr>
<tr>
<td>SPE 103 Interpersonal Communication</td>
<td>3</td>
<td>IGS 201 Convergence Tradition</td>
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<tr>
<td>IGS 200 Ancient World</td>
<td>3</td>
<td>ENG 216 Technical Writing</td>
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<td>COS 281 Introduction to Inform Sec &amp; Assurance</td>
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<td>Elective</td>
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### Junior Year

<table>
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<td>COS 300 System Design &amp; Development</td>
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<td>COS 334 Cyber Forensics</td>
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<td>COS 301 Computer Organization</td>
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<td>COS 340 Data Structures</td>
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<td>COS 310 Discrete Computing Structures</td>
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<td>COS 364 Data Storage and Data Mining</td>
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### Senior Year

<table>
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<td>COS 303 Human Perspective on Computer</td>
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<td>COS 410 Database Management Systems</td>
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<td>COS 332 Management of Info Sec ..</td>
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<td>COS 435 Adv Topics in Cyber Security</td>
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<td>COS 470 Networking &amp; Telecommunication</td>
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<td>COS 494 Capstone Project</td>
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<td>COS 484: Intro to Network Security</td>
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<td>COS 300/400 Elective</td>
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*ART 130, Recommended for CS Majors

*1 Social Science I & II: Either POS 101—American Government OR FIN 101—Financial Literacy OR HIS 103—Western Civilization; OR ECO 200—Survey of Economics OR PSY 200—General Psychology OR SOC 203—Principles of Sociology

*2 Natural Science: BIO 101 Life Science (3) OR CHE 101 General Chemistry

*3 BIO 101 Life Science; OR BIO 103 Environmental Biology; OR BIO 112 Exploration of Modern Topics in Biology; OR

PHS 231 - Introduction to Astronomy; OR PHS 211 - Earth & Environmental Science; OR PH 221 Introduction to

Weather Studies; OR OR PHYS 130 - Physics & Society; OR PHY 211 Physics I. See your Advisor.

* See course catalog for UNV Requirements.

Note: This ladder is a planning tool used for advising only. It is not a binding document for the graduation requirement. See your advisor.
# Bachelor of Science in Computer Science 2013-2014

## Game Development Option

**Total Hours:** 120  
**Core Hours:** 43

### Freshman Year

<table>
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<th>Fall</th>
<th>Hours</th>
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<tbody>
<tr>
<td>Fine Arts and Letters</td>
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<td>Social Science I</td>
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<td>ENG 101 English Composition I</td>
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<td>ENG 102 English Composition II</td>
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<td>MAT 115 College Algebra</td>
<td>3</td>
<td>MAT 125 Business Calculus and Matrices</td>
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<td>UNV 102 KSU Orientation*</td>
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<tr>
<td>COS 107 Problem Solving, Logic &amp;</td>
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<td>Natural Science*</td>
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**Total Semester Credit Hours:** 16  
**Total Semester Credit Hours:** 15

### Sophomore Year

<table>
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<th>Fall</th>
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<th>Spring</th>
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<tbody>
<tr>
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<td>COS 109 Principles of Computer Science II</td>
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<td>COS 275 Game Programming Foundation</td>
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<td>IGS 201 Convergent Traditions</td>
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<td>SPE 103 Interpersonal Communication</td>
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<td>COS 200 Computer Information Systems</td>
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<td>IGS 200 The Ancient World</td>
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<td>ENG 216 Technical Writing</td>
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<td>COS 281 Ontro to Comp Security &amp; A</td>
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<td>COS 375 Game Programming Foundation II</td>
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**Total Semester Credit Hours:** 17  
**Total Semester Credit Hours:** 16

### Junior Year

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<th>Fall</th>
<th>Hours</th>
<th>Spring</th>
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<tbody>
<tr>
<td>COS 310 Discrete Computing Structures</td>
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<td>COS 302 Operating Systems</td>
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<td>COS 301 Computer Organization</td>
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<td>COS 340 Data Structures</td>
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<td>DGE 300 Software Engineering</td>
<td>3</td>
<td>COS 385 Gaming and Computer Graphics</td>
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<td>COS 303 Human Perspective on Computing</td>
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<td>COS 475 Game Design and Development</td>
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<td>Foreign Language</td>
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**Total Semester Credit Hours:** 16  
**Total Semester Credit Hours:** 15

### Senior Year

<table>
<thead>
<tr>
<th>Fall</th>
<th>Hours</th>
<th>Spring</th>
<th>Hours</th>
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<tbody>
<tr>
<td>COS 470 Networking &amp; Telecomm.</td>
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<td>COS 300/400 Elective</td>
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<tr>
<td>COS 300 System Design &amp; Develop.</td>
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<td>Elective</td>
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<td>COS 494 Capstone Project</td>
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**Total Semester Credit Hours:** 12  
**Total Semester Credit Hours:** 13

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1 Fine Arts and Letters: **EITHER** ART 130 - Introduction to Art (Recommended for CS Majors) **OR** MUS 130 - Introduction to Music **OR** THE 130 (Introduction to Theater) **OR** ENG 211 - Introduction to Literature (requires ENG 102)

2 Social Science I & II: **EITHER** POS 101 - American Government **OR** FIN 101 - Financial Literacy **OR** HIS 103 - Western Civilization **OR** ECO 200 - Survey of Economics **OR** PSY 200 - General Psychology **OR** SOC 203 - Principles of Sociology

3 Natural Science: **EITHER** BIO 101 - Life Science **OR** CHE 109 - Chemistry in Context

4 Natural Science: **EITHER** BIO 101 - Life Science **OR** BIO 103 - Environmental Biology **OR** BIO 112 - Exploration of Modern Topics in Biology **OR** CHE 109 - Chemistry in Context **OR** PHS 201 - Physical Sciences I **OR** PHS 202 - Physical Sciences II **OR** PHS 211 - Earth & Environmental Science **OR** PH 221 - Introduction to Weather Studies **OR** PHS 231 - Introduction to Astronomy **OR** PHY 130 -

* See course catalog for UNV Requirements.

Note: This ladder is a planning tool used for advising only. It is not a binding document for the graduation requirement. See your advisor.
1. **NEW COURSE NUMBER:** COS 281

2. **NEW COURSE TITLE:** Introduction to Information Security & Assurance

3. **CAPSULE STATEMENT OF COURSE CONTENT FOR CATALOG:**
   
   This course provides the foundation for understanding the key issues associated with protecting information assets, determining the levels of protection and response to security incidents, designing a consistent, reasonable information security system with appropriate intrusion detection and reporting features, and learning the principles of trusted computing bases (TCB).

4. **DESCRIPTION OF COURSE CONTENT FOR COURSE SYLLABUS:**
   
   This course provides the foundation for understanding the key issues associated with protecting information assets, determining the levels of protection and response to security incidents, designing a consistent, reasonable information security system with appropriate intrusion detection and reporting features, and learning the principles of trusted computing bases (TCB).

5. **PREREQUISITES:** None

6. **REQUIRED COURSE:** X Yes _____ No

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Final Faculty Senate Approved Form as of 10/4/89
7. CREDITS: (a) Number ___3___
   
   (b) Variable credit Explanation: ________________________________
   
   (c) Will course be repeatable for credit: ___Yes ___X No
   
   (d) Grading systems permitted: ___X_A-F ___ P/F ___ Credit/No Credit
       Exceptions: ________________________________

8. Course Level: ___ Elementary
   ___ Intermediate
   ___X Intermediate/Advanced
   ___ Advanced

9. CROSSLISTING DEPARTMENTS (attach supporting letters):

10. SCHEDULING PLAN: ___ Each semester
    ___X Annually
    ___ Biennially
    ___ Occasionally

11. STARTING WITH:
    ___X Fall, ___ Spring, ___ Summer, ___ 2013 ___ Academic Year

12. IS THIS A "SPECIAL TOPICS" COURSE? ___ Yes ___X No

13. EXPLANATION OF NEED FOR THE SPECIFIC COURSE:
    The division of Computer Science is revising its Information Security because of the changing demand in the technology. Not only this course is part of this revised option, it will attract public from several markets such as homeland security, police department, CIA, FBI etc.

    The division is also proposing a certificate in Computer Security. Anyone can obtain a KSU diploma by completing a required course COS 281, and three (3) other courses out of the 4 courses in the Information Security option. These courses don’t require any other prerequisite.
14. RELATIONSHIP TO OTHER LIKE COURSES IN THE DISCIPLINE/UNIVERSITY:
   It is related to COS 332, COS 334, COS 484, COS 435 as they are part of both Information
   Security option and Cyber Forensics certificate.

15. COURSE WHICH MAY BE DROPPED AS A RESULT OF THIS PROPOSAL: None

16. INSTRUCTIONAL STAFF (if non-faculty, attach Vita): Division Faculty

17. COURSE SYLLABUS AND TEXT REFERENCE:
   Please attach. Include methods the instructor will use to evaluate student performance and a
   bibliography of available and needed references for Blazer Library.

   Syllabus attached. Relevant material will be available online and Internet.
Kentucky State University
Division Computer and Technical Sciences
Course: COS 281
Course Title: Introduction to Information Security & Assurance  (3 credit hours)

Syllabus

PROFESSOR: Wasim A AL-Hamdani
OFFICE: HH314A
OFFICE PHONE: 6728
FAX: 502-597-6179
E-MAIL: Wasim.al-hamdani@kysu.edu

SEMIESTER: Fall, 2013
CLASS TIME:
CLASSROOM: HH313
OFFICE HOURS:

I. MISSION STATEMENTS:
The Objectives and Learning Outcomes of this course directly support the Mission of the University, College, and Division, and may be found at: www.kysu.edu/about; www.kysu.edu/academics/collegesAndSchools/default.htm; www.kysu.edu/academics/collegesAndSchools/collegeofartsocialsciencesandinterdisciplinarystudies/default.htm.

II. NOTICE TO STUDENTS WITH DISABILITIES:
Any student who feels he or she may need an accommodation based on the impact of a disability may contact the Disability Resource Center (DRC) at (502) 597-5076, or visit Hill Student Center, Suite 220C, to arrange reasonable accommodations for documented disabilities. The student is required to obtain verification from the DRC and deliver the signed DRC document to the instructor at the beginning of the semester for reasonable accommodations.

III. COURSE DESCRIPTION – COURSE RATIONALE:

This course provides the foundation for understanding the key issues associated with protecting information assets, determining the levels of protection and response to security incidents, designing a consistent, reasonable information security system with appropriate intrusion detection and reporting features, and learning the principles of trusted computing bases (TCB).

IV. COURSE OBJECTIVES:

This course will focus on the principles of trusted computing bases (TCB). Issues regarding authentication; access control and authorization; discretionary and mandatory security policies; secure kernel design; secure operating systems; and secure databases. The purpose of the course is to provide the student with an overview of the field of information security and assurance. Students will be exposed to the spectrum of security activities, methods, methodologies, and procedures. Coverage will include inspection and protection of information assets, detection of and reaction to threats to information assets, and examination of pre- and post-incident procedures, technical and managerial responses, and an overview of the information security planning and staffing functions.

- Specific topic coverage includes:
- Introduction to Information Security
- The Need for Security
- Legal, Ethical, and Professional Issues in Information Security
- Risk Management
- Planning for Security
- Security Technology: Firewalls, VPNs, and Wireless
- Security Technology: Intrusion Detection and Prevention Systems and Other Security Tools
V. STUDENT LEARNING OBJECTIVES/OUTCOMES:

- Students will learn what is information security
- Students will learn how to protect computer environments
- Students will learn how to lifecycle of security program

VI. REQUIRED TEXTS:


VII. BLACKBOARD: all supporting materials are located in Blackboard course site

E-Mail
All students are requested to obtain an e-mail account. If you have any questions about the course or need assistance, please contact me in person or by telephone during office hours; or by e-mail at any time. Also, you may submit the end-of-chapter case project assignments in class on the due date or by e-mail with a date stamp at or before 5:00 P.M. on the due date. E-mail submissions should be submitted as an attachment in Microsoft Word format.

VIII. COURSE SPECIFIC REQUIREMENTS, EXPECTATIONS, POLICIES:

Student required reading chapters, papers;

IX. EVALUATION PROCEDURES:

End chapter 20%
Midterm 20%
Final 40%
Quizzes 20%
  - Quiz 1 in Chapter 1 -- Chapter 6 = 10%
  - Quiz 2 in chapter 7 -- Chapter 12 = 10%

All lectures notes will be open at the beginning of assigned week and will be closed at the end of the assigned week;
All quizzes will be posted on blackboard for period of 3 days;
All exams will be posted on blackboard for period of one day only;
Attendance is = 10%;
Attendance will be evaluated through Webinar attendance;
All home work will be submitted using blackboard drop box and will be removed at the end of the assigned week;
## X. COURSE CALENDAR/SCHEDULE:

Specific topic coverage includes:

<table>
<thead>
<tr>
<th>Week</th>
<th>Topics</th>
<th>Chapter Readings</th>
<th>Exams</th>
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</thead>
<tbody>
<tr>
<td>1</td>
<td>Introduction to Information Security</td>
<td>Chapter 1</td>
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<td>2</td>
<td>The Need for Security</td>
<td>Chapter 2</td>
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<td>3</td>
<td>Legal, Ethical, and Professional Issues in Information Security</td>
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<td>6</td>
<td>Security Technology: Firewalls, VPNs, and Wireless</td>
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<td>7</td>
<td>Review</td>
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<td>Security Technology: Intrusion Detection and Prevention Systems</td>
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<td>and Other Security Tools</td>
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<td>10</td>
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<td>Physical Security</td>
<td>Chapter 9</td>
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<td>12</td>
<td>Implementing Information Security</td>
<td>Chapter 10</td>
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<td>13</td>
<td>Security and Personnel</td>
<td>Chapter 11</td>
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<td>14</td>
<td>Information Security Maintenance and eDiscovery</td>
<td>Chapter 12</td>
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<tr>
<td>15</td>
<td>Review</td>
<td></td>
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</tbody>
</table>
Student Acknowledgment of Receipt of Course Information

My signature below indicates that I have received a course syllabus and have read the "Common Policies for all Courses at KSU" at www.kysu and for the following course: _________.

I agree to read these documents before the next class period. I understand that the policies contained within these two documents apply to me and to all other students in the class, and by my signature I agree to abide by these policies.

Name (please print): __________________________________________

CWID: ______________________________________________________

Signature: __________________________________________________

Date: ___________________________________________________________________

Contact information (please PRINT clearly):

Local Address: ____________________________________________________

____________________________________________________________________

Local Phone: ______________________________________________________

E-Mail: __________________________________________________________

Or, the instructor may choose the electronic option:

Student Acknowledgment of Receipt of Course Information

Once you have read the syllabus and all applicable readings suggested by the syllabus, type exactly what is written below in Statements 1) and 2) send me an email (through Outlook) or a Message (through Blackboard) with the following two statements, and make sure "Student Acknowledgment of Receipt of Course Information" is on the subject line and make sure you put your name at the end:

1) This statement acknowledges that A) I have received the course syllabus for: ___________; and B) I have read the "Common Policies for all Courses at KSU" found at www.kysu.edu and I understand this statement will be printed and kept in my permanent file or be placed in my electronic Blackboard file for future reference.

2) I agree to read these documents before sending in this email. I understand that the policies contained within these documents apply directly to me and to all students in the class. By sending this email I agree to abide by these policies, and recognize that not abiding by these policies could adversely affect my grade in this class and/or my standing as a student at KSU.
1. NEW COURSE NUMBER: COS 332

2. NEW COURSE TITLE: Management of Information Security

3. CAPSULE STATEMENT OF COURSE CONTENT FOR CATALOG:

This course focuses on the managerial aspects of information security and assurance. Topics covered include access control models, information security governance, and information security program assessment and metrics. Coverage on the foundational and technical components of information security is included to reinforce key concepts. The course includes up-to-date information on changes in the field, such as national and international laws and international standards like the ISO 27000 series.

4. DESCRIPTION OF COURSE CONTENT FOR COURSE SYLLABUS:

This course focuses on the managerial aspects of information security and assurance. Topics covered include access control models, information security governance, and information security program assessment and metrics. Coverage on the foundational and technical components of information security is included to reinforce key concepts. The course includes up-to-date information on changes in the field, such as national and international laws and international standards like the ISO 27000 series.

5. PREREQUISITES: COS 281

Final Faculty Senate Approved Form as of 10/4/89
6. REQUIRED COURSE: _X_  Yes    _____  No

7. CREDITS:  (a) Number ___3___

(b) Variable credit Explanation: ____________________________________________

(c) Will course be repeatable for credit: _Yes    _X_  No

(d) Grading systems permitted: _X_  A-F    ___  P/F    ___  Credit/No Credit

Exceptions: ____________________________________________

8. Course Level:   ___  Elementary
                  ___  Intermediate
                  _X_  Intermediate/Advanced
                  ___  Advanced

9. CROSSLISTING DEPARTMENTS (attach supporting letters):

10. SCHEDULING PLAN:  ___  Each semester
                  _X_  Annually
                  ___  Biennially
                  ___  Occasionally

11. STARTING WITH:

                  _X_  Fall,  ____  Spring,  ____  Summer,  ____  2013  Academic Year

12. IS THIS A "SPECIAL TOPICS" COURSE?  ____  Yes  _X_  No

13. EXPLANATION OF NEED FOR THE SPECIFIC COURSE:

   The division of Computer Science is revising its Information Security because of the
   changing demand in the technology. Not only this course is part of this revised option, it will
   attract public from several markets such as homeland security, police department, CIA, FBI
   etc.
The division is also prosing a certificate in Computer Security in anyone can obtain a KSU diploma by completing a required course COS 281, Information to Information Security & Assurance and 3 other courses out of the 4 other courses in the Information Security option. These courses don’t require any other prerequisite.

14. RELATIONSHIP TO OTHER LIKE COURSES IN THE DISCIPLINE/UNIVERSITY:
   It is related to COS 281, COS 334, COS 435, COS 484 as they are part of both Information Security option and Cyber Forensics certificate.

15. COURSE WHICH MAY BE DROPPED AS A RESULT OF THIS PROPOSAL: None

16. INSTRUCTIONAL STAFF (if non-faculty, attach Vita): Division Faculty

17. COURSE SYLLABUS AND TEXT REFERENCE:
   Please attach. Include methods the instructor will use to evaluate student performance and a bibliography of available and needed references for Blazer Library.

   Syllabus attached. Relevant material will be available online.
Kentucky State University  
Division Computer and Technical Sciences  
Course: COS 332  
Course Title: Management of Information Security (3 credit hours)  
Syllabus

PROFESSOR: Wasim A AL-Hamdani  
OFFICE: HH314A  
OFFICE PHONE: 6728  
FAX: 502-597-6179  
E-MAIL: Wasim.al-hamdani@kysu.edu

[Roman numerals are optional]  
I. MISSION STATEMENTS: [This statement should remain intact.]  
The Objectives and Learning Outcomes of this course directly support the Mission of the University, College, and Division, and may be found at: www.kysu.edu/about; www.kysu.edu/academics/collegesAndSchools/default.htm; www.kysu.edu/academics/collegesAndSchools/collegeofartsocialsciencesandinterdisciplinarystudies/default.htm.

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This course focuses on the managerial aspects of information security and assurance. Topics covered include access control models, information security governance, and information security program assessment and metrics. Coverage on the foundational and technical components of information security is included to reinforce key concepts. The course includes up-to-date information on changes in the field, such as national and international laws and international standards like the ISO 27000 series.

IV. COURSE OBJECTIVES:  
In this class, you will learn the topics listed below:

- Introduction to the Management of Information Security  
- Planning for Security  
- Planning for Contingencies  
- Information Security Policy  
- Developing the Security Program  
- Security Management Models  
- Security Management Practices  
- Risk Management: Identifying and Assessing Risk  
- Risk Management: Controlling Risk  
- Protection Mechanisms  
- Personnel and Security  
- Law and Ethics
After completing the course, students will be able to:
- Identify and prioritize information assets.
- Identify and prioritize threats to information assets.
- Define an information security strategy and architecture.
- Plan for and respond to intruders in an information system
- Describe legal and public relations implications of security and privacy issues.
- Present a disaster recovery plan for recovery of information assets after an incident.

V. STUDENT LEARNING OBJECTIVES/OUTCOMES:

As a result of completing this course, students will be able to:
- Describe threats to information security
- Identify methods, tools and techniques for combating these threats.
- Identify types of attacks and problems that occur when systems are not properly protected.
- Explain integral parts of overall good information security practices
- Identify and discuss issues related to access control.
- Describe the need for and development of information security policies, and identify guidelines and models for writing policies.
- Define risk management and explain why it is an important component of an information security strategy and practice.
- Describe the types of contingency plan and the steps involved in developing each.
- Identify security issues related to personnel decisions, and qualifications of security personnel.

VI. REQUIRED TEXTS:

Management of Information Security, 4rd Edition
Michael E. Whitman - Herbert J. Mattord

VII. BLACKBOARD: all supporting materials are located in Blackboard course site

E-Mail
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Student required reading chapters, papers;
Student required reading chapters, papers;

**IX. EVALUATION PROCEDURES:**

End chapter 20%
Midterm 20%
Final 40%
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<td>11</td>
<td>Protection Mechanisms</td>
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<td>12</td>
<td>Personnel and Security</td>
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<td>13</td>
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<td>14</td>
<td>Final Exam</td>
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</tbody>
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I agree to read these documents before the next class period. I understand that the policies contained within these two documents apply to me and to all other students in the class, and by my signature I agree to abide by these policies.

Name (please print): ____________________________________________

CWID: ________________________________________________________

Signature: _____________________________________________________

Date: _________________________________________________________

Contact information (please PRINT clearly):

  Local Address: ________________________________________________
  _____________________________________________________________

  Local Phone: ________________________________________________

  E-Mail: ______________________________________________________

Or, the instructor may choose the electronic option:

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2) I agree to read these documents before sending in this email. I understand that the policies contained within these documents apply directly to me and to all students in the class. By sending this email I agree to abide by these policies, and recognize that not abiding by these policies could adversely affect my grade in this class and/or my standing as a student at KSU.
CURRICULUM COMMITTEE
NEW COURSE PROPOSAL

ACADEMIC UNIT: Division of Computer Science
DATE PREPARED: February 21, 2013
PRIMARY AUTHOR(S): Ashok Kumar

ACADEMIC DISCIPLINE
FACULTY APPROVED: 
(Committee Chairperson’s Signature)

CHAIRPERSON/DEAN
APPROVED: 
(Chairperson’s/Dean Signature)

1. NEW COURSE NUMBER: COS 334

2. NEW COURSE TITLE: Cyber Forensics

3. CAPSULE STATEMENT OF COURSE CONTENT FOR CATALOG:

This course will deal with an exciting area of computer forensics, crimes, law and investigations. Data is collected from cell phone, mobile devices, documents, emails etc. and evidence is collected by using various forensics tools. The Pretrial and Courtroom Experiences of a Computer Forensics Investigator will also be discussed.

4. DESCRIPTION OF COURSE CONTENT FOR COURSE SYLLABUS:


5. PREREQUISITES: COS 281

Final Faculty Senate Approved Form as of 10/4/89

Kentucky State University is an equal educational and employment opportunity/affirmative action institution
6. REQUIRED COURSE:  X  Yes  _____ No

7. CREDITS:  (a) Number 4

    (b) Variable credit Explanation: ________________________________

    (c) Will course be repeatable for credit:  Yes  X No

    (d) Grading systems permitted:  X A-F  ___ P/F  ___ Credit/No Credit

        Exceptions: ________________________________

8. Course Level:  _____ Elementary

    ___ Intermediate

    X  Intermediate/Advanced

    ___ Advanced

9. CROSSLISTING DEPARTMENTS (attach supporting letters):

10. SCHEDULING PLAN:  _____ Each semester

    X  Annually

    ___ Biennially

    ___ Occasionally

11. STARTING WITH:

    _____ Fall,  X  Spring,  _____ Summer:  2014  Academic Year

12. IS THIS A "SPECIAL TOPICS" COURSE?  _____ Yes  X  No

13. EXPLANATION OF NEED FOR THE SPECIFIC COURSE:
    The division of Computer Science is revising its Information Security because of the removing demand in the technology. Not only this course is part of this revised option, it will attract public from several markets such as homeland security, police department, CIA, FBI etc.
CURRICULUM CHANGE PROPOSAL
ACADEMIC UNIT: DIVISION OF COMPUTER SCIENCE
COURSE NUMBER: COS 334
PAGE 3

The division is also prosing a certificate in Computer Security in: anyone can obtain a KSU diploma by completing a required course COS 281, Information to Information Security & Assurance and 3 other courses out of the 4 other courses in the Information Security option. These courses don’t require any other prerequisite.

14. RELATIONSHIP TO OTHER LIKE COURSES IN THE DISCIPLINE/UNIVERSITY:
It is related to COS 281, COS 332, COS 484, COS 435 as they are part of both Information Security option and Cyber Forensics certificate.

15. COURSE WHICH MAY BE DROPPED AS A RESULT OF THIS PROPOSAL: None

16. INSTRUCTIONAL STAFF (if non-faculty, attach Vita): Division Faculty

17. COURSE SYLLABUS AND TEXT REFERENCE:
Please attach. Include methods the instructor will use to evaluate student performance and a bibliography of available and needed references for Blazer Library.

Syllabus attached. Relevant material will be available online and Internet.
Kentucky State University
Division of Computer and Technical Sciences
Department of Computer Science
Course: COS 334
Course Title: Computer Forensics (4 credit hours)
Syllabus

PROFESSOR: Dr. Ashok Kumar
OFFICE: HH 327
OFFICE PHONE: 502-597-6211
FAX: 502-597-6179
E-MAIL: ashok.kumar@kysu.edu

SEMESTER: Spring 2013
CLASS TIME: TBA
CLASSROOM: TBA
OFFICE HOURS: TBA

I. MISSION STATEMENTS:
The Objectives and Learning Outcomes of this course directly support the Mission of the University, College, and Division, and may be found at: www.kysu.edu/about; www.kysu.edu/academics/collegesAndSchools/default.htm; www.kysu.edu/academics/collegesAndSchools/collegeofartsocialsciencesandinterdisciplinarystudies/default.htm.

II. NOTICE TO STUDENTS WITH DISABILITIES:
Any student who requires an accommodation due to a documented disability may contact the Disability Resource Center (DRC) at (502) 597-5076, or visit Hill Student Center, Suite 220C, to arrange for reasonable accommodations. The student is required to obtain verification from the DRC and deliver the signed DRC document to the instructor specifying the accommodations. The student is encouraged to complete this process at the beginning of the semester since an approval for accommodations is not retroactive. The accommodations become effective upon receipt of the DRC approval by the faculty member from the student. Additional information concerning the DRC and accommodations can be found at http://www.kysu.edu/about/divisions/studentAffairsAndEnrollment/disabilityResourceCenter.htm.

III. COURSE DESCRIPTION – COURSE RATIONALE: This course will deal with an exciting area of computer forensics, crimes, law and investigations. Data is collected from cell phone, mobile devices, documents, emails etc. and evidence is collected by using various forensics tools. The Pretrial and Courtroom Experiences of a Computer Forensics Investigator will also be covered.

IV. COURSE OBJECTIVES:
After taking this course, students will have background in various area of the field of cyber forensics and will have learned to use forensics tools to investigate the crimes using the technology.

V. STUDENT LEARNING OBJECTIVES/OUTCOMES:
- Learn the investigation steps
- Learn to use forensics tools:
  o ProDiscover Basic
  o AccessData (Forensic Toolkit, FTK Imager, Registry Viewer)
  o X-Way (WinHex Demo)
  o DiskExplorer for NTFS
  o HDHOST
- Learn how to do investigation of email, cell phone, mobile devices,
- Learn about data acquisition from crime scenes
- Recovering graphics images hidden in the text documents
- Investigating Windows and DOS systems
- Expert Testimony
- Ethics for the Expert Witness

VI. REQUIRED TEXTS:
1. Guide to Computer Forensics and Investigation
   Authors: Bill Nelson, Amelia Phillips, and Christopher Steuart
   Publisher: Course Technology, ISBN: 978-1-435-49883-9
2. Lab Manual for Guide to Computer Forensics and Investigation
   Author: Andrew Blitz
   Publisher: Course Technology, ISBN: 978-1-435-49885-3

VII. BLACKBOARD (Blackboard.kysu.edu): (Blackboard.kysu.edu): All the lecture presentations, copy of syllabus, assignments, quizzes, tests, your grades, link to submit your assignments, online quizzes etc. will be posted on the Blackboard. If you are new to Blackboard, access blackboard.kysu.edu (NO WWW) and follow the directions on the left for login to the Blackboard. Click the link to this course and you will be inside the module to this course.

VIII. COURSE SPECIFIC REQUIREMENTS, EXPECTATIONS, POLICIES:
ASSIGNMENTS:
All assignments are due on the due date at the beginning of the class. A penalty of 10% is assessed for the each day an assignment is late. An assignment that is more than 1 class late will not get credit. A due date will be given online or in class for each weekly homework assignment. To earn full credit for an assignment, you should:

- Make sure it is turned in on time
- Present it neatly and must be well organized

Students are required to take the examinations on the dates and at the times they are scheduled. Makeup examination will be given only in special circumstance beyond the control of the student.

ATTENDANCE:
• Students are expected to attend class regularly. In the event that a student must miss a class, the student is responsible for finding out what assignments were made, what due dates were announced, what material was covered.
• Any individual student with poor class attendance should not expect the instructor to provide out of class assistance.
• Tardiness to class is discouraged.
• Excused absences require documented proof.

CHEATING AND PLAGIARISM:
While you are encouraged to seek help and to learn teamwork, copying of any significant part of another's work may result in a zero grade for all parties for the work in question, and may result in a failing grade for the course. Cheating on exams will be handled in compliance with KSU policy.

IX. EVALUATION PROCEDURES:
Your score will be based on the following:

• Weekly Assignments: 20%
• In class Labs: 20%
• Midterm: 30%
• Final Exam: 30%

Grades will be assigned using the following scale:
90-100: A, 80 – 89: B, 70 – 79: C, 60 – 69 D, 0 – 59 F

X. COURSE CALENDAR/SCHEDULE (Tentative):

Week 1: Chapter 1 - Computer Forensics and Investigation Processes.
Week 2: Chapter 2 - Understanding Computing Investigations.
Week 3: Chapter 3 - The Investigator’s Office and Laboratory.
Week 4: Chapter 4 - Data Acquisitions.
Week 5: Chapter 5 - Processing Crime and Incident Scenes
Week 6: Chapter 5 - Processing Crime and Incident Scenes (Continued)
Week 7: Chapter 6 - Working with Windows and DOS Systems.
Week 8: Chapter 7 - Current Computer Forensics Tools & Midterm
Week 9: Chapter 7 - Current Computer Forensics Tools (Continued)
Week 10: Chapter 9 - Computer Forensics Analysis & Validation.
Week 11: Chapter 10 - Recovering Graphics Files.
Week 12: Chapter 11 - Virtual Machines, Network Forensics, and Live Acquisitions & Test 3
Week 13: Chapter 12 - E-mail Investigations.
    Chapter 13 - Cell Phone and Mobile Device Forensics.
Week 14: Chapter 14 - Report Writing for High-Tech Investigations.
    Chapter 16 - Ethics and High-Tech Investigations.
Student Acknowledgment of Receipt of Course Information

My signature below indicates that I have received a course syllabus for the following course, ________________, and I have been notified that the “Common Policies for all Courses at KSU” can be found throughout the University Catalogue at:
http://www.kysu.edu/about/divisions/studentAffairsAndEnrollment/enrollmentManagement/registrar/Kentucky-State+University+Catalogue.htm

I agree to read these documents, and I agree to sign and deliver this copy of the “Student Acknowledgment” form within two (2) weeks of the start of the semester. I understand that the policies contained within these documents apply directly to me and to all students in the class. I agree to abide by these policies, and recognize that not abiding by these policies could result in dismissal from this class and/or affect my standing as a student at KSU as per Section 2.C. of the Student Handbook and Section XIX.G.1. of the University Catalogue.

Name (please print): _____________________________________________

CWID: _________________________________________________________

Signature: ______________________________________________________

Date: __________________________________________________________

Contact information (please PRINT clearly):

Local Address: __________________________________________________

Local Phone: ____________________________________________________

E-Mail: _________________________________________________________

[Or, the instructor may choose the electronic option:]

Student Acknowledgment of Receipt of Course Information

Read the syllabus and the “Common Policies for all Courses at KSU” found throughout the University Catalogue at:

http://www.kysu.edu/about/divisions/studentAffairsAndEnrollment/enrollmentManagement/registrar/Kentucky-State+University+Catalouge.htm

Then, type exactly what is written below in Statements (1) and (2), and deliver this statement as instructed; make sure “Student Acknowledgment of Receipt of Course Information” is on the subject line. Adding your name and student ID at the end of the statement will stand as your signature. I also agree to deliver this copy of the “Student Acknowledgment” form within two (2) weeks of the start of the semester. I understand that the policies contained within these documents apply directly to me and to all students in the class. I agree to abide by these policies, and recognize that not abiding by these policies could result in dismissal from this class and/or affect my standing as a student at KSU as per Section 2.C. of the Student Handbook and Section XIX.G.1. of the University Catalogue.

1) This statement acknowledges that: (A) I have received the course syllabus for ____________, and (B) I have read the “Common Policies for all Courses at KSU.” I understand this statement will be printed and kept in my permanent file or be placed in my electronic Blackboard file for future reference.

2) I agree that I have read these documents before sending this email to my Instructor. I understand that the policies contained within these documents apply directly to me and to all students in the class. By sending this email I agree to abide by these policies, and recognize that not abiding by these policies could result in dismissal from this class and/or affect my standing as a student at KSU.

Student Name and ID number
1. NEW COURSE NUMBER: COS 435

2. NEW COURSE TITLE: Advanced Topics in Cyber Security

3. CAPSULE STATEMENT OF COURSE CONTENT FOR CATALOG:

An in-depth study of advanced topics in information security; Topics will vary according to current trends and research directions in the field. Some possible topics include: information security, managements, risk assessment, network security, cyber forensics. The course will provide most advance knowledge in cyber security in line with some of homeland security strategically research themes and current hard problems in INFOSEC Research and knowledge, these include Current Hard Problems in INFOSEC Research.

4. DESCRIPTION OF COURSE CONTENT FOR COURSE SYLLABUS:
An in-depth study of advanced topics in information security; Topics will vary according to current trends and research directions in the field. Some possible topics include: information security, managements, risk assessment, network security, cyber forensics. The course will provide most advance knowledge in cyber security in line with some of homeland security strategically research themes and current hard problems in INFOSEC Research and knowledge, these include Current Hard Problems in INFOSEC Research.

5. PREREQUISITES: COS 281

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Kentucky State University is an equal educational and employment opportunity/affirmative action institution
6. REQUIRED COURSE:  ____ X ____ Yes  _____ No

7. CREDITS:  (a) Number 3

   (b) Variable credit Explanation: ________________________________

   (c) Will course be repeatable for credit:  ____ Yes  ____ X ____ No

   (d) Grading systems permitted:  ____ X ____ A-F  ____ P/F  ____ Credit/No Credit

       Exceptions: __________________________________________________

8. Course Level:  ____ X ____ Advanced

     ____ Elementary
     ____ Intermediate
     ____ Intermediate/Advanced

9. CROSSLISTING DEPARTMENTS (attach supporting letters):

10. SCHEDULING PLAN:  ____ X ____ Each semester

     ____ Annually
     ____ Biennially
     ____ Occasionally

11. STARTING WITH:

     ____ X ____ Fall,  ____ X ____ Spring,  ____ Summer  ____ 2014  ____ Academic Year

12. IS THIS A "SPECIAL TOPICS" COURSE?  ____ X ____ No  ____ Yes

13. EXPLANATION OF NEED FOR THE SPECIFIC COURSE:

   The division of Computer Science is revising its Information Security because of the
   changing demand in the technology. Not only this course is part of this revised option, it will
   attract public from several markets such as homeland security, police department, CIA, FBI
   etc.
The division is also prosing a certificate in Computer Security in anyone can obtain a KSU diploma by completing a required course COS 281, Information to Information Security & Assurance and 3 other courses out of the 4 other courses in the Information Security option. These courses don't require any other prerequisite.

14. RELATIONSHIP TO OTHER LIKE COURSES IN THE DISCIPLINE/UNIVERSITY:
   It is related to COS 281, COS 332, COS 334, COS 484, as they are part of both Information Security option and Cyber Forensics certificate.

15. COURSE WHICH MAY BE DROPPED AS A RESULT OF THIS PROPOSAL: None

16. INSTRUCTIONAL STAFF (if non faculty, attach Vita): Division Faculty

17. COURSE SYLLABUS AND TEXT REFERENCE:
   Please attach. Include methods the instructor will use to evaluate student performance and a bibliography of available and needed references for Blazer Library.

   Syllabus attached. Relevant material will be available online and Internet.
Kentucky State University
Division Name
Department
Course Title: Advanced Topics in Cyber Security (3 credit hours)
Syllabus

PROFESSOR: Wasim A AL-Hamdani
OFFICE: HH314A
OFFICE PHONE: 6728
FAX: 502-597-6179
E-MAIL: Wasim.al-hamdani@kysu.edu

SEMESTER: Spring 2013
CLASS TIME:
CLASSROOM: HH313
OFFICE HOURS:

I. MISSION STATEMENTS:
The Objectives and Learning Outcomes of this course directly support the Mission of the University, College, and Division, and may be found at: www.kysu.edu/about; www.kysu.edu/academics/collegesAndSchools/default.htm; www.kysu.edu/academics/collegesAndSchools/collegeofartsocialsciencesandinterdisciplinarystudies/default.htm.

II. NOTICE TO STUDENTS WITH DISABILITIES:
Any student who feels he or she may need an accommodation based on the impact of a disability may contact the Disability Resource Center (DRC) at (502) 597-5076, or visit Hill Student Center, Suite 220C, to arrange reasonable accommodations for documented disabilities. The student is required to obtain verification from the DRC and deliver the signed DRC document to the instructor at the beginning of the semester for reasonable accommodations.

III. COURSE DESCRIPTION – COURSE RATIONALE:
An in-depth study of advanced topics in information security; Topics will vary according to current trends and research directions in the field. Some possible topics include: information security, managements, risk assessment, network security, and cyber forensics. The course will provide most advance knowledge in cyber security in line with some of homeland security strategically research themes and current hard problems in INFOSEC Research and knowledge, these include Current Hard Problems in INFOSEC Research.

IV. COURSE OBJECTIVES:
The purpose of this advanced topics course is to provide an in-depth study of the fundamental issues related to information security, information security managements, network security and forensic analysis, by building upon the knowledge in both software and hardware, will be addressed. Commercial tools for setting up firewalls, intrusion detection, event monitoring and logging, forensic analysis, will be used in the teaching labs to provide the hands-on experience. Further, computer related crimes using documented trial cases will be discussed. We will also use expert speakers from the relevant domains including security system administrators, law enforcement officers, attorneys and lawyers in cyber laws, to provide guest lectures. The class will be divided into small groups to work on team projects from a selected list of topics. Time permitting, we will discuss more advanced topics. Some possible topics are

- Scalable Trustworthy Systems
- Enterprise-Level Metrics (ELMs)
- System Evaluation Life Cycle
- Combating Insider Threats
- Combating Malware and Botnets
- Global-Scale Identity Management
• Survivability of Time-Critical Systems
• Situational Understanding and Attack Attribution
• Provenance
• Privacy-Aware Security
• Usable Security

V. STUDENT LEARNING OBJECTIVES/OUTCOMES:
Class time will encompass: most recent development, achievement, methodologies, and research topics in Cyber security

VI. REQUIRED TEXTS:

Supplemental Texts: NA

Additional Readings: different papers and chapters

The Library and the Media Center NA

VII. BLACKBOARD: most materials will be posted on Blackboard

VIII. COURSE SPECIFIC REQUIREMENTS, EXPECTATIONS, POLICIES:
Student responsibilities to write two papers

IX. EVALUATION PROCEDURES:
The rubric; how students earn their grade
Research papers 20%
Midterm 20%
Final 40%
Quizzes 20%

X. COURSE CALENDAR/SCHEDULE:
The design of this section is to remain completely up to the instructor
Student Acknowledgment of Receipt of Course Information

My signature below indicates that I have received a course syllabus and have read the "Common Policies for all Courses at KSU" at www.kysu and for the following course: _____________.

I agree to read these documents before the next class period. I understand that the policies contained within these two documents apply to me and to all other students in the class, and by my signature I agree to abide by these policies.

Name (please print): ____________________________

CWID: ________________________________________

Signature: ______________________________________

Date: _________________________________________

Contact Information (please PRINT clearly):

Local Address: ________________________________

____________________________________________

Local Phone: _________________________________

E-Mail: _______________________________________

Or, the instructor may choose the electronic option:

Student Acknowledgment of Receipt of Course Information

Once you have read the syllabus and all applicable readings suggested by the syllabus, type exactly what is written below in Statements 1) and 2) send me an email (through Outlook) or a Message (through Blackboard) with the following two statements, and make sure "Student Acknowledgment of Receipt of Course Information" is on the subject line and make sure you put your name at the end:

1) This statement acknowledges that A) I have received the course syllabus for: ____________; and B) I have read the "Common Policies for all Courses at KSU" found at www.kysu.edu and I understand this statement will be printed and kept in my permanent file or be placed in my electronic Blackboard file for future reference.

2) I agree to read these documents before sending in this email. I understand that the policies contained within these documents apply directly to me and to all students in the class. By sending this email I agree to abide by these policies, and recognize that not abiding by these policies could adversely affect my grade in this class and/or my standing as a student at KSU.
1. CURRENT COURSE NUMBER: D G E - 300

2. CURRENT COURSE TITLE (Limited to 32 Spaces Including Blanks):
   Software Engineering for Computer Games

3. STARTING WITH:
   X Fall, ____ Spring, ____ Summer, ____ 2013 Academic Year

4. CROSSLISTING DEPARTMENTS (attach supporting letters):
   1) ____________________________ (c) ____________________________
   2) ____________________________ (d) ____________________________

5. CHECK ITEM(S) BELOW FOR CHANGES DESIRED:

   ___ Course Number       ___ Course Title       ___ Crosslist Status
   ___ Credits             ___ Grading System      ___ Prerequisites
   ___ Planned Offering    X Catalogue Description ___ Delete Course
   ___ Course Level        ___ Required Status    ___ Other

6. EXPLANATION/JUSTIFICATION FOR REQUESTED CHANGE(S). ENTER BOTH CURRENT AND PROPOSED DATA FOR EACH CHANGE (use additional pages as necessary):

   The characteristics of video game development are different from those of classic software development practices. Specifically, game development teams are diverse in that they will also contain non-technical staff (artists, producers, etc) and that the assets that need to be managed not only include

Final Faculty Senate Approved Form as of 10/4/89
source code but also artwork, multimedia data, flowboards and the like. Also, especially when deploying to mobile platforms or consoles, code must be cross-compiled to the target architecture. These specific differences will be addressed in the class in addition to topics that would be included in a classic software engineering class.
DGE 300

Revised Course Description for CATALOG:

This course teaches students the basic skills of software engineering. The course will cover topics in software processes, software development tools, software design, testing and management. The contents will be provided with the intent to develop computer games in a team environment.
Kentucky State University
Division of Computer and Technical Sciences
Department of Computer Science
Course: DGE 300
Course Title: SOFTWARE ENGINEERING FOR COMPUTER GAMES (3 credit hours)

Syllabus

PROFESSOR: Dr. J. Hannemann
OFFICE: HH 314J
OFFICE PHONE: 502-597-6380
FAX: 502-597-6179
E-MAIL: ashok.kumar@kysu.edu

SEMIESTER: Fall 2013
CLASS TIME: TBA
CLASSROOM: TBA
OFFICE HOURS: TBA
Rest by Appointments

I. MISSION STATEMENTS:
The Objectives and Learning Outcomes of this course directly support the Mission of the University, College, and Division, and may be found at: www.kysu.edu/about; www.kysu.edu/academics/collegesAndSchools/default.htm;

II. NOTICE TO STUDENTS WITH DISABILITIES:
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III. COURSE DESCRIPTION – COURSE RATIONALE:
Software engineering is a critical issue for the design and development of computer games, which is inherently a team-based effort. Designing, implementing, testing, and deploying computer games are used as a case study in this course to teach software engineering concepts with special emphasis on how to handle diversity in both the development team and target platforms.

IV. COURSE OBJECTIVES:
1. An ability to understand the challenges of video game software design and development.
2. Exposure to suitable programming languages used in common game engines and platforms.
3. Developing an understanding of the design and implementation of components of simple games.
4. Demonstrating the design and implementation process by leading students through the process.
5. Understanding concepts used in gaming as a whole.
6. Using common tools to facilitate and manage the design and development process.

V. STUDENT LEARNING OBJECTIVES/OUTCOMES:
Software Engineering is to acquaint students with the use of engineering principles and tools applied to the development of video game software. At the conclusion of the course, the successful student will be competent at all of the following tasks, and proficient at most of them:
• Understanding the basics skills in Software Engineering
• Understanding different process models.
• Understanding requirements modeling, design concepts, architecture, and component level design.
• Understanding quality management and testing.
• Understanding software asset management.
• Using common tools to facilitate and manage the design and development process.
• Applying the principles and tools to the development of software.

Most of the learning in this course will be accomplished when you attend the class and do the homework. Therefore it is important that you put some personal effort into it.

---

VI. REQUIRED TEXTS:

None.

Most of the frameworks and tools will be free and open source software. The accompanying documentation will be recommended reading for this class and appropriate links will be distributed via the course website.

Supplemental materials will be placed on the web page. You will be responsible for obtaining and reviewing this material if you are not in class when it is provided.

---

VII. BLACKBOARD: (Blackboard.kysu.edu): All the lecture presentations, copy of syllabus, assignments, quizzes, tests, your grades, link to submit your assignments, online quizzes etc. will be posted on the Blackboard. If you are new to Blackboard, access blackboard.kysu.edu (NO WWW) and follow the directions on the left for login to the Blackboard. Click the link to this course and you will be inside the module to this course.

---

VIII. COURSE SPECIFIC REQUIREMENTS, EXPECTATIONS, POLICIES, ASSIGNMENTS:

All assignments are due on the due date at the beginning of the class. A penalty of 15% is assessed for each day an assignment is late. Assignment more than one week late will not get credit. A due date will be given online or in class for each weekly homework assignment.

Students are required to take the examinations on the dates and at the times they are scheduled. No makeup examinations will be given without a doctor's excuse or the equivalent.

Programming assignments are not considered complete and will not receive full credit unless they:
• function properly
• are fully documented
• are well structured
• have been submitted to me (printed copy)
• have been demonstrated to me
Late assignments will not be accepted.

---

IX. EVALUATION PROCEDURES:

Your score will be based on the following:
Homework and programs 40%
Test 1 15%
Test 2 15%
Final Examination 20%
Attendance and Participation 10%

Your total points will be compared to the total points available to all class members to determine a percentage. Grades will be assigned by the following scale:

90-100 = A, 80-89 = B, 70-79 = C, 60-69 = D, 0-59 = F

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**X. COURSE CALENDAR/TENTATIVE SCHEDULE:**

<table>
<thead>
<tr>
<th>Week</th>
<th>Topics</th>
<th>Reading</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Introduction to Game programming</td>
<td>Chapter 1</td>
</tr>
<tr>
<td>2-3</td>
<td>Types, variables, I/O and Lab</td>
<td>Chapter 2</td>
</tr>
<tr>
<td>4</td>
<td>Branching, While loops and Program planning</td>
<td>Chapter 3</td>
</tr>
<tr>
<td>5</td>
<td>In the Lab assignments bases on Chapters 1-3</td>
<td></td>
</tr>
<tr>
<td>6</td>
<td>Test 1 on Chapters 1-3 (1 hour) For Loops, Strings and Tuples</td>
<td>Chapter 4</td>
</tr>
<tr>
<td>7</td>
<td>Chapter 4 continued</td>
<td>Chapter 4</td>
</tr>
<tr>
<td>8</td>
<td>Design games based on Chapters 1-4</td>
<td></td>
</tr>
<tr>
<td>9</td>
<td>Lists and Dictionaries</td>
<td>Chapter 5</td>
</tr>
<tr>
<td>10</td>
<td>Lab: Design Hangman Game</td>
<td></td>
</tr>
<tr>
<td>11</td>
<td>Test 2 on Chapters 4, 5 and labs (2 hours)</td>
<td>Chapter 6</td>
</tr>
<tr>
<td>12</td>
<td>Functions Continued</td>
<td>Chapter 6</td>
</tr>
<tr>
<td>13</td>
<td>Labs on Functions</td>
<td></td>
</tr>
<tr>
<td>14</td>
<td>Files and Exceptions</td>
<td>Chapter 7</td>
</tr>
<tr>
<td>15</td>
<td>Review and Final Game</td>
<td></td>
</tr>
<tr>
<td>16</td>
<td>Final</td>
<td></td>
</tr>
</tbody>
</table>

*The instructor reserves the right to make changes to (delete, add, or modify) this Syllabus as the semester progresses.

** In the later part of the semester, students will be working in groups and design and demonstrate their game. Each game will be evaluated by the fellow students and will constitutes 5% of the grade from the Homework and Assignments component.

---

**XI. ATTENDANCE:**

- Students are expected to attend class **regularly**. In the event that a student must miss a class, the student is responsible for finding out what assignments were made, what due dates were announced, what material was covered.
- Any individual student with poor class attendance should not expect the instructor to provide out of class assistance.
- Tardiness to class is discouraged.
- Excused absences require documented proof.
- 10% are assigned for this and attendance will be recoded few times in the classes and labs.

---

**XII. CHEATING AND PLAGIARISM:**

While you are encouraged to seek help and to learn teamwork, copying of any significant part of another's work may result in a zero grade for all parties for the work in question, and may result in a failing grade for the course.
Cheating on exams and quizzes will be handled in compliance with KSU policy.
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Name (please print): ______________________________________

CVID: ____________________________________________

Signature: __________________________________________

Date: ________________________________________________

Contact information (please PRINT clearly):

Local Address: _________________________________________

Local Phone: __________________________________________

E-Mail: ________________________________________________

[Or, the instructor may choose the electronic option:]

Student Acknowledgment of Receipt of Course Information

Read the syllabus and the “Common Policies for all Courses at KSU” found throughout the University Catalogue at:

http://www.kysu.edu/about/divisions/studentAffairsAndEnrollment/enrollmentManagement/registrar/Kentucky+State+University+Catalogue.htm

Then, type exactly what is written below in Statements (1) and (2), and deliver this statement as instructed; make sure “Student Acknowledgment of Receipt of Course Information” is on the subject line. Adding your name and student ID at the end of the statement will stand as your signature. I also agree to deliver this copy of the “Student Acknowledgment” form within two (2) weeks of the start of the semester. I understand that the policies contained within these documents apply directly to me and to all students in the class. I agree to abide by these policies, and recognize that not abiding by these policies could result in dismissal from this class and/or affect my standing as a student at KSU as per Section 2.C. of the Student Handbook and Section XIX.G.1. of the University Catalogue.

1) This statement acknowledges that: (A) I have received the course syllabus for ____________, and (B) I have read the “Common Policies for all Courses at KSU.” I understand this statement will be printed and kept in my permanent file or be placed in my electronic Blackboard file for future reference.

2) I agree that I have read these documents before sending this email to my Instructor. I understand that the policies contained within these documents apply directly to me and to all students in the class. By sending this email I agree to abide by these policies, and recognize that not abiding by these policies could result in dismissal from this class and/or affect my standing as a student at KSU.

Student Name and ID number
KENTUCKY STATE UNIVERSITY
FACULTY SENATE
CURRICULUM COMMITTEE

COURSE CHANGE PROPOSAL

ACADEMIC UNIT: Division of Computer Science

DATE PREPARED: 3/19/2013

PRIMARY AUTHOR(S): Dr. Zhanping Liu

ACADEMIC DISCIPLINE
FACULTY APPROVED: 3/19/2013
(Committee Chairperson's Signature)

CHAIRPERSON/DEAN
APPROVED: 3/19/2013
(Chairperson's/Dean Signature)

1. CURRENT COURSE NUMBER: D G E - 380

2. CURRENT COURSE TITLE (Limited to 32 Spaces Including Blanks):
   Online Game Development

3. STARTING WITH:
   X Fall, ___ Spring, ___ Summer, ___ 2013 Academic Year

4. CROSSLISTING DEPARTMENTS (attach supporting letters):
   1) ___________________________ (c)
   2) ___________________________ (d)

5. CHECK ITEM(S) BELOW FOR CHANGES DESIRED:
   ___ Course Number ___ Course Title ___ Crosslist Status
   ___ Credits ___ Grading System ___ Prerequisites
   ___ Planned Offering X Catalogue Description ___ Delete Course
   ___ Course Level ___ Required Status ___ Other

6. EXPLANATION/JUSTIFICATION FOR REQUESTED CHANGE(S). ENTER BOTH CURRENT AND PROPOSED DATA FOR EACH CHANGE (use additional pages as necessary):

   All gaming devices increasingly are connected to the Internet. HTML5 and JavaScript as open standards are ideal tools to develop and deploy games to a wide range of desktop and mobile devices without the need to target any specific and possibly proprietary platform. Skills learned in this course are also applicable to other areas of web-application development.

   Final Faculty Senate Approved Form as of 10/4/89

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DGE 380

Revised Course Description for CATALOG:

This course is dedicated to game development for the World-Wide-Web. This course introduces students to the features available in HTML5, CSS3, WebGL, and JavaScript to develop 2D and 3D games running on web browsers.
Kentucky State University
Division of Computer Science
Course: DGE380-01
Course Title: Online Game Development (3 credit hours)

PROFESSOR: Dr. Zhanping Liu
SEMIESTER: Fall 2013
CLASSROOM: HH 320
CLASS TIME: Tue and Thur: 2:30pm ~ 03:45pm
OFFICE: HH 314G
PHONE: 502-597-6652
FAX: 502-597-6179
E-MAIL: zhanping.liu@kysu.edu
OFFICE HOURS: TR: 11:00am-01:00pm; W: 09:00am-04:00pm; F: by appointment

I. MISSION STATEMENTS
The Objectives and Learning Outcomes of this course directly support the Mission of the University, College, and Division, and may be found at: www.kysu.edu/about; www.kysu.edu/academics/collegesAndSchools/default.htm; www.kysu.edu/academics/collegesAndSchools/collegeofartsandsciencesandinterdisciplinarystudies/default.htm.

II. NOTICE TO STUDENTS WITH DISABILITIES
Any student who requires an accommodation due to a documented disability may contact the Disability Resource Center (DRC) at (502) 597-5076, or visit Hill Student Center, Suite 220C, to arrange for reasonable accommodations. The student is required to obtain verification from the DRC and deliver the signed DRC document to the instructor specifying the accommodations. The student is encouraged to complete this process at the beginning of the semester since an approval for accommodations is not retroactive. The accommodations become effective upon receipt of the DRC approval by the faculty member from the student. Additional information concerning the DRC and accommodations can be found at http://www.kysu.edu/about/divisions/studentAffairsAndEnrollment/disabilityResourceCenter.htm.

III. COURSE DESCRIPTION — COURSE RATIONALE
This course is dedicated to game development for the World-Wide-Web. This course introduces students to the features available in HTML5, CSS3, WebGL, and JavaScript to develop 2D and 3D games running on web browsers.

IV. STUDENT LEARNING OBJECTIVES/OUTCOMES
- Using JavaScript for web program.
- Understanding the features of HTML5 relevant to web game development.
- Drawing and graphics manipulation with HTML5 Canvas.
- Creating sound with HTML5 Audio and using WebGL for 2D and 3D graphics.
- Capturing player input and create multi-player games using WebSockets and JavaScript.
- Storing game state at the client with WebStorage.
- Making web games available offline.

V. REQUIRED TEXTBOOKS
Title: HTML5 Games — Creating Fun with HTML5, CSS3, and WebGL (1st Edition, Paperback, 456 pages)
Authors: Jacob Seidelin
Publisher: John Wiley and Sons (Dec 2011 or 2012)

VI. BLACKBOARD (blackboard.kysu.edu)
- Copy of the syllabus, e-version of lecture presentations (if available), announcements / notices / warnings / reminders, assignments (and possibly quizzes), and grades et al will be posted onto the Blackboard System (or "Blackboard" in short). If you are new to Blackboard, please access http://blackboard.kysu.edu and then follow the
necessary directions regarding how to log into and PROPERLY use Blackboard. Click the link to this course and you will be inside the module to this course.

- **By registering for this class, you are assumed to be able to PROPERLY use Blackboard to locate (on Blackboard), download, locate (on your PC), and access (open / load and read, possibly after a basic file-decompression procedure that might be required due to some unknown issues with Blackboard, on your PC) all the aforementioned materials and / or files.**

- **By registering for this class, you are assumed to be able to use Blackboard to PROPERLY send the instructor your e-mails (of questions and notices) and PROPERLY submit your work of assignment (by means of e-mail attachment) WITHIN / THROUGH Blackboard by PROPERLY locating (on your PC) and attaching (to your e-mails to the instructor) your target / correct disk files. Any e-mails and / or assignment-submissions that you send to the instructor OUTSIDE of Blackboard will be IGNORED and will NOT be graded. In other words, your e-mails and / or assignment-submissions MUST be WITHIN / THROUGH Blackboard.**

- **The ONLY VALID way for ANY submission / e-mail / message to the instructor is “My Courses → Game Development for the Web — Spring 2013 → Course Content Menu → Tools → Messages → Inbox → Create Message → To → Select Zhaping Liu (Instructor) from the left column and add it to the right column (Recipients) → Provide an appropriate subject for the e-mail (e.g., your name and assignment number) → Attach your file(s) → Click the Submit button at the bottom”. Please Note that ANY OTHER METHOD is WRONG.**

### VII. COURSE SPECIFIC REQUIREMENTS, EXPECTATIONS, POLICIES

- The instructor is teaching the whole class instead of any single person or part of the class. Thus there must be a uniform set of rules / regulations (including those mentioned in Section VI) that apply to the whole class and that all students need to obey. Those who fail to follow these rules will cause unnecessary issues or at least inconveniences. Following these rules is an important prerequisite for a happy good-quality teaching-learning experience.

- As emphasized in Section VI above, how to properly use Blackboard is outside of the scope of this course. ALL students are assumed to possess such basic and necessary computer operating skills. Please review Section VI for more detail.

- Accessibility to KSU / (DGE380-01) classroom computers, if necessary and possible, and / or the computer login-account issues (if any) are outside the scope of the instructor. Whenever necessary and possible, students facing such issues may and should contact the (technical) staff of the KSU registrar office (and possibly other relevant KSU offices that you will need to find out by yourselves) and / or the system administrator of the Computer Science department (e.g., Dave at Dave@SnappyDataServices.com; Tel: 502-597-6661; Room: Hathaway Hall #322).

- The KSU registrar office (or possibly other relevant KSU offices) and / or other professors / advisors officially / formally registered you to the class. In case your name and / or other related information is not properly entered into the Wired / Banner system, please contact the relevant office(s) to fix such problems. Otherwise you may fail to completely or timely receive various kinds of class-related information / materials from Blackboard (where the list of students and their information are a copy from the KSU Wired / Banner system).

- By registering for this class, EVERY student is assumed to have his / her own correct textbook (precisely specified above in Section V and reported to the KSU bookstore earlier back in Nov 2012 based on the guaranteed availability from the publisher). In case a student does not (timely) possess the specified correct textbook (with the correct version) due to any reason / issue (e.g., delayed orders by the KSU bookstore, failure of the student to buy a copy from the bookstore / publisher or by other means, and the cost reason etc), he / she will need to solve this problem all by himself / herself. The instructor will not provide any hard-copy / e-copy of (any part of) the textbook. The instructor is responsible for helping students with technical questions related to the course materials.

- **Attending classes**
  - It is mandatory that every student attend every class (unless it is cancelled by the instructor / KSU due to some important / unavoidable reasons). It is strongly urged that every student enter the classroom in time and leave the classroom on time to guarantee the necessary quality of the teaching-learning process. Those absent from, late for, or early to withdraw from the class will be responsible for making up the course materials and for
finding out all announcements (of assignments, quizzes, and exams etc) / notices / warnings / reminders that are covered and / or mentioned in the specific class.

- Any student with poor class attendance may not expect the instructor to provide extra / out-of-class assistance.
- Excused absences require documented proof.
- Any in-class quiz or in-class QnAs (Questions-and-Answers) assignment that a student misses for any reason will NOT be made up, despite a documented proof, once the answers are announced to the class. In other words, it must be made up as soon as possible within a limited period of time.

- Following instructions
  - By registering for this class and signing the student acknowledgment page (the last page of this syllabus), every student is assumed to follow the instructions given by the instructor. For example, the instructor may provide step-by-step instructions to all students, either in the class or via Blackboard, in order for students to finish a specific task. Those who ignore (due to excessive confidence etc), neglect (insufficient attention in the class etc), or miss such instructions (e.g., due to class absence etc) will be responsible for any consequences.
  - Due to time and / or complexity reasons, the instructor might not afford to repeat the instructions for a specific task. Thus every student is expected to be attentive in the class, check Blackboard frequently (at least one time per day), and read very carefully the announcements / notices / warnings / reminders that the instructor posts onto Blackboard.
  - Please always check Blackboard for possibly available answers before asking any questions. Blackboard is a very important and professional (effective and efficient or time-saving) platform for the instructor to provide the WHOLE CLASS with accurate detailed descriptions / explanations / answers. Questions asked again and again by individual students (who miss classes and / or fail to check Blackboard regularly) that have been already properly and completely addressed via Blackboard might NOT be accepted.

- Submitting Assignments
  - Every assignment, along with the due date & time, is announced in the class and / or via Blackboard.
  - NO any make-up or late submission is accepted regardless of any reason / excuse — this strict rule might be different from the counterparts of other classes. Accordingly a two-week period (twice the length of a typical one-week period) is usually given for each assignment. This is intended to avoid and reject any late / make-up submissions that would significantly affect the original schedule and progress of the class.
  - As emphasized above, please submit any work of assignment WITHIN / THROUGH Blackboard by means of e-mail attachment — any submission outside Blackboard will be ignored and will NOT be graded. Every student needs to possess necessary computer operating skills (please see Section VI) while following instructions (that the instructor might give, e.g., on what files need to be submitted) in order to submit the correct disk file(s).
  - Once a student submits a file or a set of files required by an assignment (WITHIN / THROUGH Blackboard), he / she may check the submission status (to check if the file or files are attached and correct and check if the instructor has actually received it or them) by retrieving it / them via “My Courses → Game Development for the Web → Spring 2013 → Course Content Menu → Tools → Messages → Sent”. Please try to avoid multiple submissions for an assignment. In case of multiple submissions, the latest one will be accepted and graded by default. Thus any empty / invalid submission (e.g., an e-mail either without any attachment or with a wrong attachment), regardless of either intention or carelessness, can NOT serve as a placeholder or excuse for any late / make-up submission.
  - Please do NOT delete ANY e-mails, particularly those containing the submissions of your assignment work, in your “SENT” (i.e., your outgoing e-mail box) that you have sent to the instructor even though some e-mails might be redundant (due to possibly multiple submissions). The Blackboard-SENT box is the ONLY way / evidence that a student can show, on his / her side, to the instructor whether or not he / she has indeed submitted his / her work of assignment properly — NO any excuse is accepted in this aspect.
  - In fact the instructor will NEVER delete any (even redundant or useless) e-mails (either with or without attachment) that the instructor receives from any student. This is intended to keep an original accurate record of the student-instructor communications, which can be used to check whether or not the instructor has indeed received a PROPER / EFFECTIVE file from any student.
  - Please present your work neatly and make it well organized.
Taking Exams

Students are required to take the mid-term and final exams on the specified dates at the specified times and at the specified classrooms. Make-up exams will be given only under special circumstances (e.g., at least a special signed permission needs to be obtained from the chair of the Computer Science) beyond the control of the student.

CHEATING AND PLAGIARISM

- Unless explicitly announced as group-based, any assignment / quiz / exam should be individually-based and hence MUST be finished independently.

- Copying any part of the work from other student(s) may result in a zero grade for both or all parties (without any warning), regardless of any excuse or reason, and may result in a failing grade for the whole course. Please note that the instructor has some smart software tools (e.g., WinDiff) for quickly checking the (even quantitative) similarity between any two files. Thus please do NOT share your own work (of assignments, quizzes, and exams) with other students.

- In case any student cannot accept score zero (0), he / she might choose to report the file-duplication case to the KSU related offices for further investigation. Then he / she will have to be responsible for any bad consequences that he / she and / or the associated persons might face, e.g., a failing grade for the whole course (once the file duplication case is finally judged as a cheating / plagiarism behavior).

- Cheating on exams will be handled in compliance with KSU policies.

VIII. EVALUATION PROCEDURES

Your final score for the course will be based on the following weighted sum:

- Assignments: 30%
- Quizzes: 20%
- Midterm: 25%
- Final Exam: 25%

Grades will be assigned using the following scale:

90-100: A; 80 - 89: B; 70 - 79: C; 60 - 69: D; 0 - 59: F

IX. COURSE CALENDAR/SCHEDULE (Tentative)

| Week 01 ~ 02 | Introduction to (or Review of) JavaScript | some online materials |
| Week 03 | Game on the Web | Chapter 01 |
| Weeks 04 ~ 05 | Taking the First Steps | Chapter 02 |
| Week 06 | Building the Game | Chapter 04 |
| Week 07 | Delegating Tasks to Web Workers | Chapter 05 |
| Week 08 | Creating Graphics with Canvas | Chapter 06 |
| Week 09 | Creating the Game Display | Chapter 07 |
| Week 10 | Interacting with the Game | Chapter 08 |
| Week 11 | Animating Game Graphics | Chapter 09 |
| Week 12 | Creating Audio for Games | Chapter 10 |
| Weeks 13 ~ 14 | Creating 3D Graphics with WebGL | Chapter 11 |
| Week 15 | Local Storage and Caching | Chapter 12 |
| Week 16 | Going Online with WebSockets | Chapter 13 |

Note: Instructor may modify the schedule due to some unavoidable circumstances.
Student Acknowledgment of Receipt of Course Information

My signature below indicates that I have received a course syllabus for the following course, ____________, and I have been notified that the “Common Policies for all Courses at KSU” can be found throughout the University Catalogue at:

http://www.kysu.edu/about/divisions/studentAffairsAndEnrollment/enrollmentManagement/registrar/Kentucky+State+University+Catalogue.htm

I agree to read these documents, and I agree to sign and deliver this copy of the “Student Acknowledgment” form within two (2) weeks of the start of the semester. I understand that the policies contained within these documents apply directly to me and to all students in the class. I agree to abide by these policies, and recognize that not abiding by these policies could result in dismissal from this class and/or affect my standing as a student at KSU as per Section 2.C. of the Student Handbook and Section XIX.G.1. of the University Catalogue.

Name (please print): ________________________________

CWID: ________________________________

Signature: ________________________________

Date: ________________________________

Contact information (please PRINT clearly):

Local Address: ________________________________

Local Phone: ________________________________

E-Mail: ________________________________

[Or, the instructor may choose the electronic option:]

Student Acknowledgment of Receipt of Course Information

Read the syllabus and the “Common Policies for all Courses at KSU” found throughout the University Catalogue at:

http://www.kysu.edu/about/divisions/studentAffairsAndEnrollment/enrollmentManagement/registrar/Kentucky+State+University+Catalogue.htm

Then, type exactly what is written below in Statements (1) and (2), and deliver this statement as instructed; make sure “Student Acknowledgment of Receipt of Course Information” is on the subject line. Adding your name and student ID at the end of the statement will stand as your signature. I also agree to deliver this copy of the “Student Acknowledgment” form within two (2) weeks of the start of the semester. I understand that the policies contained within these documents apply directly to me and to all students in the class. I agree to abide by these policies, and recognize that not abiding by these policies could result in dismissal from this class and/or affect my standing as a student at KSU as per Section 2.C. of the Student Handbook and Section XIX.G.1. of the University Catalogue.

1) This statement acknowledges that: (A) I have received the course syllabus for ____________, and (B) I have read the “Common Policies for all Courses at KSU.” I understand this statement will be printed and kept in my permanent file or be placed in my electronic Blackboard file for future reference.

2) I agree that I have read these documents before sending this email to my Instructor. I understand that the policies contained within these documents apply directly to me and to all students in the class. By sending this email I agree to abide by these policies, and recognize that not abiding by these policies could result in dismissal from this class and/or affect my standing as a student at KSU.

Student Name and ID number