Course Information
Course Name: **IDC 5602 - Cybersecurity: A Multidisciplinary Approach**

Credit Hours: 3.0

Semester-Year: Fall 2015

Location: Mixed: Reduced Classes and Online

**Instructor** Bruce Caulkins, Ph.D.
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**Email:** caulkinsuniv@gmail.com

**Co-Instructor** Peter Kincaid, Ph.D.
**Phone:** 407-882-1330
**Office Hours:** By appointment.
**Email:** pkincaid@ist.ucf.edu or j peterkincaid@gmail.com
**Course Description**
This is a core course for the Graduate Certificate in Modeling and Simulation of Behavioral Cybersecurity. More info can be found at - [http://www.graduatecatalog.ucf.edu/programs/program.aspx?id=11981](http://www.graduatecatalog.ucf.edu/programs/program.aspx?id=11981). This graduate certificate provides students with an interdisciplinary modeling and simulation approach to cybersecurity with a particular emphasis on the behavioral aspects of cybersecurity and cyber operations. This graduate certificate is beneficial to individuals who have an interest in interdisciplinary studies and problem solving for modeling, simulation, and behavioral aspects of cybersecurity.

This course consists of modeling and simulation fundamentals as applied to cybersecurity including operating system installation and administration for hardware, network architectures, layers, protocols, and configurations. Serves as an introduction to the next two courses in the certificate with topics such as business continuity planning and security management, attack, defense, and cyber weakness at a high level. Modeling and simulation concepts are discussed as complements to activities supporting cybersecurity in small and large organizations.

**Reading Material**

Further, the rest of the material that will be used for this class will mainly consist of academic and military texts and information sources:

Other Useful resources
- SANS Reading Room, http://www.sans.org/reading-room/
- SANS @RISK Newsletters, http://www.sans.org/newsletters/at-risk/xv/23
- Oak Ridge Cyber Analytics, http://orca.ornl.gov/Oak_Ridge_Cyber_Analytics.html

Course Requirements
- Short Bio
Post a short description of your background (under “Discussions”), what you expect to get out of this course, your current and past professional experience, and maybe something interesting about you. You might also post a picture of yourself.

- Assignments
Three assignments will be on specific issues related to topics covered in the course.

- Discussions
Discussion questions will be released according to the class scheduled as specified in this Syllabus, and will be available for posting the Monday of the first week and close the Friday of the following week. During this period you need to make a minimum of three postings, the first of which should be about one or two paragraphs and written to be the first posting in a thread of discussion. Second and subsequent postings could be responses to someone else’s initial posting. Use full reference citations as appropriate. Discussion forums, once open will remain open until the end of class and you may want to carry on a discussion, after the grading period ends.
Use the following conventions when composing a discussion posting:

1. During a Discussion assignment, deadlines for posting to and replying will be specified with each assignment. It is a good practice to always check the Discussions multiple times during the week.

2. If you want to send a personal message to the instructor or to another student, use e-mail rather than the discussions.

3. Use the appropriate Discussion Topic; don’t post everything on the "Main" Discussion Topic.

4. A helpful hint for use with both discussions and e-mail --- Compose your message in your word-processing application in order to check spelling, punctuation, and grammar --- then copy and paste your composition into e-mail or the discussion. This also saves online time.

5. Everyone should feel free to participate in class and online discussions. Regular and meaningful discussion postings constitute a substantial portion of your grade.

6. Be courteous and considerate. It is important to be honest and to express yourself freely, but being considerate of others is just as important and expected online, as it is in the classroom.

7. Explore disagreements and support assertions with data and evidence.

8. "Subject" headings: use something that is descriptive and refer to a particular assignment or discussion topic when applicable. Some assignments will specify the subject heading.

9. Use the "reply" button rather than the "compose" button if you are replying to someone else’s posting.

10. Do not use postings such as "I agree," "I don’t know either," "Who cares," or "ditto." They do not add to the discussion, take up space on the Discussions, and will not be counted for assignment credit.

11. Avoid posting large blocks of text. If you must, break them into paragraphs and use a space between paragraphs.
Out-of-class Final
This consists of a series of questions relating to course content not covered in the weekly assignments. It will be turned in as a written report.

Evaluation and Grading

<table>
<thead>
<tr>
<th>Letter Grade</th>
<th>Points</th>
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<tbody>
<tr>
<td>A</td>
<td>93 – 100 points</td>
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<tr>
<td>A-</td>
<td>90 – 92 points</td>
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<td>B+</td>
<td>87 – 89 points</td>
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<tr>
<td>B</td>
<td>83 – 86 points</td>
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<tr>
<td>B-</td>
<td>80 – 82 points</td>
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<tr>
<td>C+</td>
<td>77 – 79 points</td>
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<tr>
<td>C</td>
<td>73 – 76 points</td>
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<tr>
<td>C-</td>
<td>70 – 72 points</td>
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<tr>
<td>D+</td>
<td>67 – 69 points</td>
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<td>D</td>
<td>63 – 66 points</td>
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<tr>
<td>D-</td>
<td>60 – 62 points</td>
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<td>F</td>
<td>59 and below</td>
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Grading

<table>
<thead>
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<th>Assignment</th>
<th>Points</th>
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</thead>
<tbody>
<tr>
<td>Assignments (1 x 10 pts + 2 x 20 pts)</td>
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<tr>
<td>Discussions (4 x 7 pts + 1 bio x 2 pts)</td>
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<tr>
<td>Final Exam</td>
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<tr>
<td>TOTAL</td>
<td>100</td>
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Class Schedule

Classes Begin: August 26, 2015
Classes End: December 2, 2015
**Fall 2015 Holidays:** Labor Day, September 7, 2015, Veterans Day, November 11, 2015, and Thanksgiving Day, November 26, 2015

**Some Applicable Websites**
- [www.ist.ucf.edu](http://www.ist.ucf.edu) (Institute for Simulation and Training)
- [www.scs.org](http://www.scs.org) (Society for Computer Simulation)
Academic Honesty
I expect a high level of integrity and honesty in this course. See UCF Golden Rules for specifics at http://goldenrule.sdes.ucf.edu

Copyright
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Disability Statement
The University of Central Florida is committed to providing reasonable accommodations for all persons with disabilities. This syllabus is available in alternate formats upon request. Students with disabilities who need accommodations in this course must contact the professor at the beginning of the semester to discuss needed accommodations. No accommodations will be provided until the student has met with the professor to request accommodations. Students who need accommodations must be registered with Student Disability Services, Student Resource Center Room 132, phone (407) 823-2371, TTY/TDD only phone (407) 823-2116, before requesting accommodations from the professor.

Third-Party Software and FERPA
During this course you might have the opportunity to use public online services and/or software applications sometimes called third-party software such as a blog or wiki. While some of these could be required assignments, you need not list any personally identifying information on a public site. Do not post or provide any private information about yourself or your classmates. Where appropriate you may use a pseudonym or nickname. Some written assignments posted publicly may require personal reflection/comments, but the assignments will not require you to disclose any personally identifiable information. If you have any concerns about this, please contact the course instructor.