IDS6148 Human–Systems Integration Administrivia

Instructor Contact

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Course Information

- **Course Name:** IDS6148 - Human-Systems Integration in Modeling and Simulation
- **Credit Hours:** 3 Credit Hours
- **Semester/Year:** Spring 2016
- **Location:** Online (W-Mode Course)

Contact protocol

Please use WEBCOURSES email to contact us if you have questions about the curriculum, assignments, or grades. The primary means of communication is our live class sessions and our Webcourse site. It is your responsibility to check the course site at least twice a week. Also, be sure to set your course options so that you are informed immediately if there are any announcements.

If you have questions regarding Webcourses itself (e.g. difficulty loading pages, problems uploading assignments), please use the "help" button on the upper right hand of your screen and contact Online@UCF for technical support.

Course Overview

Course Description

Human–Systems Integration (HSI) is a multidisciplinary field of study that emphasizes integrated, high-level design, acquisition, testing, and operation of complex human–technological systems. This course will introduce students to a systems engineering mindset, and it will directly explore issues related to the planning, design, and evaluation of HSI engineering efforts. These include principles of the primary HSI domains (manpower, personnel, human

factors, training, safety, health, survivability, and habitability), as well as related topics, such as HSI leadership and political/cultural issues. Evaluation techniques will also be emphasized, and the course will include a variety of analyses approaches that help HSI engineers forecast downstream outcomes, reduce risk, manage costs, and improve system performance. Finally, the course will include discussion about how each of these techniques can support the development of Modeling and Simulation (M&S) systems as well as how M&S can support the execution of HSI tasks.

Course Objectives

Graduates of this course will be able to effectively describe the purpose, general process, and benefits of the HSI approach. They will be able to list relevant (to their discipline) HSI standards, failure and success use-cases, and analysis tools. They will also be able to explain, in detail, how HSI processes and M&S technologies can mutually support one another. Finally, they will be able to conduct a limited-scale HSI analysis and, based upon the analysis, propose reasonable systems-level solutions.

Student Learning Outcomes

- Describe and apply knowledge of systems engineering, HSI, and the HSI domains
- Describe HSI standards, use-cases, and analysis tools for a content domain
- Describe and conduct a variety of HSI planning tasks
- Describe and conduct HSI tradeoff and ROI analyses
- Describe and defend the use of HSI for M&S systems development
- Describe how M&S technologies can support some HSI processes
- Describe and apply human performance theories and principles to HSI tasks
- Describe and apply knowledge of political, organizational, social, and economic issues associated with integrating HSI tasks

Texts

Required Texts

- N/A – We rely on articles, which are available online and/or through the UCF Libraries

Deadlines

No late work is accepted. All assignments have a window of submission opportunity and your assignments will be accepted any time within that window. The assignments are open, so you may post your submission at any time up to the due date, but late work is not acceptable. That

said, we will consider exceptional circumstances on a case-by-case basis, so don't hesitate to keep communications open with us. We do not offer extra credit.

The Fine Print (Standard Ethical Guidelines and Required Caveats)

General Course Conduct

1. **Plagiarism will not be tolerated**. Assignments that include plagiarized content will receive a zero, and students will not be permitted to make-up or re-do the project. (If you aren't sure what constitutes plagiarism, then check-out the discussion thread on this topic.)
2. Late submissions are not accepted.
3. Missed quizzes may not be retaken. If you miss a quiz, you receive a "zero" for that quiz.
4. Check the course announcements area at least every-other day. Set your options for announcements to push to your email.
5. Be certain to sign your e-mail messages.
6. When you email us through Webcourses, we will try to get back to you within 72 hours.
7. In email and discussions, check spelling, grammar, and punctuation, but (depending upon context) go ahead and use colloquial language. Use leet, emoticons, and other short-hand (when appropriate!).
8. In discussions, use the "reply" button rather than the "compose" button if you are replying to someone else's post.
9. In discussions, avoid "I agree" or other short, non-substantive posts. They take up space in the Discussions.
10. In all assignments, make sure you respect image copyrights. Do not go to Google Images and download copyrighted images. There are many copyright free image directories; use them!

Grades/Method of Evaluation

I use a 90-80-70-60 scale, based on percentage of total points. I do my best to give prompt feedback to your work so that you are able to know how you are doing as the course goes on. That said, a large chunk of your points are collected in the second half of the course, so make sure you are tracking on the point values of individual assignments. Take advantage of the rubrics for assignments, as they will guide you to achieving maximum credit for your work.

Academic Honesty

Plagiarism and Cheating of any kind on an examination, quiz, or assignment will result at least in an "F" for that assignment (and may, depending on the severity of the case, lead to an "F" for the

entire course) and may be subject to appropriate referral to the Office of Student Conduct for further action. See the *UCF Golden Rule* for further information. I will assume for this course that you will adhere to the academic creed of this University and will maintain the highest standards of academic integrity. In other words, don't cheat by giving answers to others or taking them from anyone else. I will also adhere to the highest standards of academic integrity, so please do not ask me to change (or expect me to change) your grade illegitimately or to bend or break rules for one person that will not apply to everyone. Finally, I reserve the right to use plagiarism-detection services, such as Turn-It-In.com.

Accessibility 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 Accessibility Services, Student Resource Center Room 132, phone (407) 823-2371, TTY/TDD only phone (407) 823-2116, before requesting accommodations from the professor.

Copyright

This course may contain copyright protected materials such as audio or video clips, images, text materials, etc. These items are being used with regard to the Fair Use doctrine in order to enhance the learning environment. Please do not copy, duplicate, download or distribute these items. The use of these materials is strictly reserved for this online classroom environment and your use only. All copyright materials are credited to the copyright holder.

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** make 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 identity-sensitive information. If you have any concerns about this, please contact your instructor.

Financial Aid Requirements about "Engagement"

All faculty are required to document students' academic activity at the beginning of each course. To satisfy the requirement in this course, all students must complete the "Week 1 Post: Introduction" assignment as soon as possible to demonstrate that you are actually engaged with this course. Failure to do so may result in a delay in the disbursement of your financial aid. Due to this regulation, the "Week 1 Post: Introduction" assessment is due sooner than usual; we are

required to complete this compliance assessment by the end of the first week of class**.** Otherwise students may not receive their financial aid.

Changes/Announcements

Though we try to plan for everything, life will surprise us and we may have to make adjustments. In the event that anything in this syllabus changes (e.g. changes in due dates, contact information), we will use a broad announcement so that all students are informed immediately. Again, it is critically important that you set your Webcourse announcements so that you receive all notifications and be sure to check the class site at least twice a week.

All Graded Assignments and Quizzes

The list below shows all of the graded tasks you'll be asked to complete this semester. You *should* be able to access all of them, now, except for the Midterm and Final exam, which will be unlocked later in the semester.