

ESI 6552
Systems Architecture
(Spring 2018)

1. Description: (3 credit hours). Systems engineering is a discipline that addresses the design and management of systems of increasing complexity in industrial, social, and commercial applications. This course will acquaint students with concepts of systems architecture and applications of related analytical methods to real-world systems.
2. Pre-requisites: calculus, linear algebra.
3. Course Objectives: Upon completion of this course, students will obtain introductory knowledge in the following topics: system architecture process, tools and evaluation methods, economic evaluation models, complexity, network analysis (tbd). The course is generally intended for students majoring in Industrial and Systems Engineering and other engineering disciplines.
4. Course Format: This class is primarily based on lectures. Slides/notes: Whenever applicable, slides and other material will be posted on course website.
5. Instructor: Dr. Maciej Rysz
 - a. Office location: REEF 135
 - b. E-mail address: mwrysz@ufl.edu
 - c. Office hours: F 2:30-4:30pm
6. Teaching Assistant: NA
 - a. Office location: NA
 - b. E-mail address: NA
 - c. Office hours: NA
7. Course website: <http://elearning.ufl.edu/> (login with gatorlink ID and password)
8. Meeting Location: REEF 110. When in Gainesville: TBD
9. Recording Times: REEF section: W 10:00-12:00 pm and Th 1:30-2:30 pm CST. Classes will be recorded at REEF campus and videos will be available online on the same day (typically). On occasion, the lectures may be recorded in Gainesville. The instructor will notify students with the time and location in such cases.
10. Class/laboratory schedule: N/A
11. Material and Supply Fees: N/A

12. Textbooks and Software **Recommended but NOT Required:**

- a. Ed Crawley, Bruce Cameron, Daniel Selva, *Systems Architecting, Strategy and Product Development for Complex Systems*, ISBN-10: 0-13-397534-7; ISBN-13: 978-0-13-397534-5
- b. Maier, *The Art of Systems Architecting*, 3rd edition, 2009, CRC Press. ISBN: 781420079135.

13. Software:

- a. QuickTime (Presentation)
- b. Gephi (Network Analysis)

14. Course Outline (Order may be modified):

- Introduction to Systems Architecture & related concepts
- Economic Evaluation Models
- Network science & Complexity (tbd)
- Other topics may be covered, time permitting

15. Attendance and Expectations: Since this is an EDGE course, attendance will not be recorded and is voluntary. Every student will be treated in the same manner and with proper respect. Every effort will be made to respond to each request promptly; however, due to the large number of students, delays in replying to emails are possible. The assignments are to be submitted on or before the posted due date. Late submission penalty of 25% per day will be applied to late submissions. **It is your responsibility to visit the course website regularly, read the posted announcements and be aware of assignment submission deadlines and procedures.**

16. Grading: Each assignment/project/exam will be graded on a 100 point scale. If there are concerns regarding assigned grades, it is required that they are brought forth to the TA or instructor no later than 7 days after the solutions are made available.

17. Grading Scale:

Percent	Grade	Grade Points
93 – 100	A	4.00
90-92.9	A-	3.67
87-89.9	B+	3.33
83-86.9	B	3.00
80-82.9	B-	2.67
77-79.9	C+	2.33
73-76.9	C	2.00
70-72.9	C-	1.67

Grades may be curved at the instructor's discretion; however, the posted standard scale will not be tightened (that is, for instance, if your overall average is 90 points or more, you will get an A regardless of whether the curve is applied).

In order to graduate, graduate students must have an overall GPA and an upper-division GPA of 3.0 or better (B or better). Note: a B- average is equivalent to a GPA of 2.67, and therefore, it does not satisfy this graduation requirement. For more information on grades and grading policies, please visit:

<http://gradschool.ufl.edu/catalog/current-catalog/catalog-general-regulations.html#grades>

18. **Make-up Exam/Project Policy:** Make-up exams/projects can be granted only if a student provides a documented acceptable reason for not being able to attend a regularly scheduled exam/project. All make-up requests must be submitted to the instructor BEFORE the scheduled exam/project date.
19. **Honesty Policy:** All students admitted to the University of Florida have signed a statement of academic honesty committing themselves to be honest in all academic work and understanding that failure to comply with this commitment will result in disciplinary action. This statement is a reminder to uphold your obligation as a UF student and to be honest in all work submitted and exams taken in this course and all others.
20. **Accommodation for Students with Disabilities:** Students Requesting classroom accommodation must first register with the Dean of Students Office. That office will provide the student with documentation that he/she must provide to the course instructor when requesting accommodation.
21. **UF Counseling Services:** Resources are available on-campus for students having personal problems or lacking clear career and academic goals. The resources include:
 - UF Counseling & Wellness Center, 3190 Radio Rd, 392-1575, psychological and psychiatric services.
 - Career Resource Center, Reitz Union, 392-1601, career and job search services.
22. **Disclaimer:** The instructor reserves the right, when necessary, to alter the grading policy, change examination dates, and modify the syllabus and course content. Modifications will be announced on the course website. Students are responsible for announced changes.