

Course Syllabus - ISM3113
Spring 2020



This Scholarly-Enriched Course has been designed to teach specific course content, which will include the production of scholarly work that utilizes writing, critical thinking, and information literacy.

General Information																
Course Number/CRN	ISM 3113/CRN 11058															
Course Title	Systems Analysis and Design															
Semester/Year	Spring 2020															
College/Department	Lutgert College of Business/Information Systems and Operations Management (ISOM)															
Meeting Times/Location	<p>Room: LH 2210</p> <table border="1"> <thead> <tr> <th>Class</th> <th>Start Date</th> <th>End Date</th> <th>Days</th> <th>Time</th> </tr> </thead> <tbody> <tr> <td></td> <td>1/6/2020</td> <td>5/2/20</td> <td>T- R</td> <td>12:00 – 1:15 P M</td> </tr> <tr> <td></td> <td></td> <td></td> <td>Final</td> <td>April 30 10:00-12:15</td> </tr> </tbody> </table>	Class	Start Date	End Date	Days	Time		1/6/2020	5/2/20	T- R	12:00 – 1:15 P M				Final	April 30 10:00-12:15
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	1/6/2020	5/2/20	T- R	12:00 – 1:15 P M												
			Final	April 30 10:00-12:15												
Instructor Information																
Instructor	Judy Wynekoop, PhD															
Office Location	Lutgert Hall 2321															
Phone Number	239-590-7387															
E-Mail Address	jwynekoo@fgcu.edu															
Office Hours	TR 1:45 – 4:15 PM & by appointment															
Course Information																
Description	Systems concepts, structured methods, techniques, and computerized tools used in information systems analysis and design. Both procedural and object-oriented analysis design approaches are covered. Students will work on a group project to apply concepts and methods learned in class. (Fundamental programming knowledge required.)															
Course Format	<p>Upon completion of this course, the student will be able to apply basic tools, techniques, and processes to the development of a software product. Learning will be accomplished and demonstrated through both individual and group assignments.</p> <p>Students are expected to complete assigned reading and additional material before class. Classroom sessions will consist of discussion, individual and group assignments, and application of complex material. Since this is a three credit course you should expect to spend at least of 6 hours outside of class each week on preparation and assignments for this course. Material in the course is front-loaded to prepare students for the team development project and allow more time for group work in the second part of the semester.</p> <p>Students will perform the role of a systems analyst in the class. It is expected that if additional information is required or if clarification is required on an assignment, the student will ask the relevant questions of the instructor or will research other sources to obtain the information. It is the responsibility of the analyst to identify and assess the needs of users, and to be able to properly document and communicate those needs to others.</p> <p>The major areas of focus in the course (subject to modification) are as follows:</p> <ol style="list-style-type: none"> 1. Project planning 2. System development methods, emphasizing object oriented and agile 3. Role of the business analyst 4. Requirements development (elicitation, understanding, documenting, validating) 5. Logical Design 6. Prototype development 7. Low-code development technology 															
Required Materials	<p>Required textbook: <i>Systems Analysis & Design in a Changing World</i>, 7th Edition, Satzinger, Jackson & Burd, 2015, ISBN-13: 978-13-0511720-4</p> <p>Software (you do not need to buy - access will be provided)</p> <ul style="list-style-type: none"> • Microsoft Visio (documentation tool) • Mendix Development Platform <p>Additional reference and reading Materials will be provided on Canvas</p>															

Student Learning Outcomes	LEARNING OBJECTIVES	ACTIVITY/ASSESSMENT										
	Apply current & emerging development & operations practices											
	<ul style="list-style-type: none"> Apply OO tools and techniques and UML Modelling 	Team project; In class exercises; Exams										
	<ul style="list-style-type: none"> Effectively use Agile methods, tools & techniques 	Team project; In class exercises; Exams; Mendix Certification Test										
	<ul style="list-style-type: none"> Apply process oriented modelling techniques 	In class exercises; Exams										
	Identify business & IT challenges & ops & prepare IT solutions											
	<ul style="list-style-type: none"> Identify stakeholders and users 	Team Project; Exams; Papers										
	<ul style="list-style-type: none"> Utilize requirements elicitation techniques 	Team project										
	<ul style="list-style-type: none"> Identify functional and non-functional requirements 	Team project; Exams; In class exercises										
	<ul style="list-style-type: none"> Choose & justify an appropriate development framework, strategy, approach, or method for a given scenario 	Team Project; Exams										
	<ul style="list-style-type: none"> Describe a business problem or opportunity and develop alternative solutions 	Team Project; Papers; Exams										
	Effectively communicate in written, oral & graphic form											
	<ul style="list-style-type: none"> Demonstrate professional writing skills 	Team project; Papers 1 & 2										
	<ul style="list-style-type: none"> Identify and effectively use outside sources and information 	Papers 1 & 2										
	<ul style="list-style-type: none"> Develop and support logical arguments 	Papers 1 & 2; App Pitch										
	<ul style="list-style-type: none"> Deliver effective oral presentations 	App pitch; team presentation										
	<ul style="list-style-type: none"> Model system requirements graphically 	Exams; team project										
Grading Policy	<p>Graded Learning Activities/Assignments in this course:</p> <table data-bbox="375 968 1104 1129"> <tr> <td>Individual papers</td> <td>15%</td> </tr> <tr> <td>Assignments, quizzes, participation*</td> <td>10%</td> </tr> <tr> <td>Team Project</td> <td>25%</td> </tr> <tr> <td>Exams</td> <td><u>50%</u></td> </tr> <tr> <td>Total</td> <td>100%</td> </tr> </table> <p>*This will include unannounced graded exercises and quizzes e given during regular class meetings.</p> <p>Grading Scale</p> <p>93-100% A 90-92% A- 80-89% B 70-79% C 60-69% D 0-59% F</p> <p>Additional + / - grades may be given to borderline students at the discretion of the instructor</p>		Individual papers	15%	Assignments, quizzes, participation*	10%	Team Project	25%	Exams	<u>50%</u>	Total	100%
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Attendance Policy & Out of Class Work	<p>Students are expected to attend every class session. It is the student's responsibility to get notes and other information from fellow students should they have to miss a class. Students may make up graded in-class work only for authorized absences as specified in the catalog.</p> <p>The U.S. Department of Education (CFR Title 34) calls for approximately 50 minutes of "classroom or direct faculty instruction" and a minimum of two hours of "out of class" student work per week for 15 weeks, <u>per credit hour</u>. For a three credit semester-based course this equates to at least 90 hours of <u>out of class</u> work during the semester (6 hours a week).</p> <p>Remember – the 90 hours outside of class is a minimum expected to pass a class. Depending on the individual's study habits and background, more time may be expected. In ISM 3113, your out of class work will consist of reading and preparing for class, doing the Mendix training & certification course, 2-3 research papers, and a team term project. It is very important that you start the Mendix training the first week of class and start your research papers well before they are due.</p>											

Policy regarding missed exams and deadlines	<ul style="list-style-type: none"> • No make-ups for missed exams except for authorized and excused absences specified in the university catalog. A student who seeks an authorized or excused absence must submit documentation (such as a physician’s note) to me in a timely manner. See the university catalog for more information. • Graded in class activities or quizzes will be given during class time. Students with authorized or excused absences may make up the assignment. • No late assignments will be accepted for any reasons except the authorized and excused absences specified in the university catalog. A student who seeks an authorized or excused absence must submit documentation (such as a physician’s note) to me in a timely manner. See the university catalog for more information. • "Dropped by the University for not paying the full tuition" is not an authorized and excused absence. • An emergency situation such as unavailability of or inaccessibility to CANVAS due to network problems will be considered by the instructor on a case by case basis. Students must submit documentation (such as a screenshot of error messages) to me in a timely manner. Generally, technical difficulties experienced while completing or submitting an assignment at the last minute are not an excuse for a late or missed assignment. • Students with Adaptive Services documentation for test accommodations must make test arrangements with me prior to the day of an exam.
Teaching Philosophy	<p>Teaching is providing opportunities for students to learn and supporting them in the learning process. That means both the teacher (me) and students (you) must stay continually engaged and work to ensure you understand the material and can apply the knowledge and skills in a variety of situations. It goes beyond me being a talking head and you memorizing.</p> <p>While a lecture format is the easiest way out for both you and me, focusing on learning requires significantly more effort from us both. I can’t use the same lectures and Powerpoints year after year. You can’t just sit in class and memorize what I say. You must take a more active role in learning – it takes more effort. Working through readings and complicated concepts helps you to understand them and be able to apply them. You read and do research outside of class; in class, I cover complicated or muddy concepts and you work on applying concepts individually and in groups. I use peer teaching and peer review to help you understand complicated concepts.</p> <p>Although you will learn tools and techniques, it is perhaps even more important that you master critical and systems thinking skills. By the end of the course, you should be able to not only apply tools and techniques to new problems and scenarios, but also be able to coherently explain what you did, explain the rationale for using the tools, methods, techniques, etc. you chose, and evaluate how well it worked and how you could have done it differently.</p>
Policies regarding in-class use of personal electronic devices	<p>Turn off cell phones before coming to class. Laptops, tablets, etc. may be used for class work only. Do not bring food or drink to class.</p>
E-mail	<p>Canvas will be used to submit assignments, and to post course notes. Eagle and Canvas mail will be used for correspondence.</p>
Last Day to withdrawal	<p>March 27 (http://www.fgcu.edu/Registrar/academiccalendar.asp)s</p>
Disclaimer	<p>Assignments, schedules and due dates, instructions, and other course information presented in CANVAS are integral components of the course material and are hereby incorporated as part of this syllabus.</p> <p>The instructor reserves the right to change the schedule and due dates. Any changes will be reflected as necessary in Canvas. The availability and structure of certain assignments are subject to technology availability.</p>
Academic Behavior Standards and Academic Dishonesty	<p>All students are expected to demonstrate honesty in their academic pursuits. The university policies regarding issues of honesty can be found in the FGCU Student Guidebook under the Student Code of Conduct and Policies and Procedures sections. All students are expected to study this document which outlines their responsibilities and consequences for violations of the policy. The FGCU Student Guidebook is available online at http://studentservices.fgcu.edu/judicialaffairs/new.html</p> <p>Sanctions for academic dishonesty may include receiving an “F” in this course – FGCU may impose additional penalties. Incidents of academic dishonesty will be referred to the FGCU Office of Judicial Affairs. Please look up the definition of plagiarism – it includes copying something off the Internet & submitting it as your own work.</p>

Some examples of what is **NOT** OK to do:

- Working with another student & turning in the same work (e.g. spreadsheet, database, etc.).
- Emailing or posting your work to let someone else “just see how you did it”.
- Copying someone’s assignment or copying something from a book or the Internet.
- Giving or receiving help from someone (in person, on line or on the phone) during an online test.
- Telling someone else what is on a test.
- Reusing work from a past class, even if modified (If you want to build on something you have done in a past class, please first discuss with me)

Examples of what is OK:

- Discussing how to approach an assignment with another student.
- Showing someone where they might have made a mistake on an assignment.
- Asking the professor for help.
- Ask someone to proofread your paper for grammar and spelling errors (but NOT to revise or rewrite your work)

University Statements

University Nondiscrimination Statement

Florida Gulf Coast University is committed to ensuring equity and fairness for all University employees, students, visitors, vendors, contractors and other third parties. As such, the University prohibits discrimination on the bases of race, color, national origin, ethnicity, religion, age, disability, sex (including sexual harassment/assault), gender identity/expression, marital status, sexual orientation, veteran status or genetic predisposition with regard to admissions, employment, programs or other activities operated by the University. This prohibition extends to enforcement of **Title IX** of the Education Amendments of 1972. Questions or complaints should be directed to the Office of Institutional Equity and Compliance (OIEC). The OIEC’s phone number is (239)745-4366; the OIEC email address is OIEC@fgcu.edu.

Counseling and Psychological Services (CAPS)

Counseling and Psychological Services (CAPS) provides free counseling and therapy services (including psychiatry) to all FGCU students. Please walk in to the second floor Howard Hall office any week day between 8:30 and 4:30 to schedule an initial contact appointment. Visit the CAPS website at www.fgcu.edu/caps for more information. CAPS offers a 24/7 Helpline at (239) 745-3277 (EARS).

Disability Accommodations Services

Florida Gulf Coast University, in accordance with the Americans with Disabilities Act and the university’s guiding principles, will provide classroom and academic accommodations to students with documented disabilities. If you need to request an accommodation in this class due to a disability, or you suspect that your academic performance is affected by a disability, please see me or contact the Office of Adaptive Services. The Office of Adaptive Services is located in the Wellness Building. The phone number is 239-590-7956 or Video Phone (VP) 239-243-9453. In addition to classroom and campus accommodations, individuals with disabilities are encouraged to create their personal emergency evacuation plan and FGCU is committed to providing information on emergency notification procedures. You can find information on the emergency exits and Areas of Rescue Assistance for each building, as well as other emergency preparedness materials on the Environmental Health and Safety and University Police Department websites. If you will need assistance in the event of an emergency due to a disability, please contact Adaptive Services for available services and information.

Student Observance of Religious Holidays

All students at Florida Gulf Coast University have a right to expect that the University will reasonably accommodate their religious observances, practices, and beliefs. Students, upon prior notification to their instructors, shall be excused from class or other scheduled academic activity to observe a religious holy day of their faith. Students shall be permitted a reasonable amount of time to make up the material or activities covered in their absence. Students shall not be penalized due to absence from class or other scheduled academic activity because of religious observances. Where practicable, major examinations, major assignments, and University ceremonies will not be scheduled on a major religious holy day. A student who is to be excused from class for a religious observance is not required to provide a second party certification of the reason for the absence.

Lecture Capture Technology/FGCU Capture – Classroom Recording

This course may employ technology that will allow for audio and/or video recording of live classroom sessions. This lecture capture technology is utilized for the sole purpose of enhancing student learning. It may provide for supplemental student instruction via secure links to recorded session(s), the live stream of courses, presentations of off-site guest speakers and/or the delivery of course

instruction utilizing “flipped classroom” methodologies. Student questions and/or comments may be included as a part of any session being recorded.

How To Log Into the Course in Canvas

- Activate your FGCU EagleMail Account (if you have not done this yet). Your FGCU EagleMail account MUST be activated to log in to Canvas. If you are a first time student, you will need your PIN and Eagle ID, both of which are assigned at registration.
 - If you don't know your PIN, you will need to go to the Registrar's office to retrieve it.
 - To activate your account, visit <http://admin.fgcu.edu/IS/applications/studentaccts/activate.asp>.
- Log in to Canvas at <https://fgcu.instructure.com/login> . You need to use FGCU EagleMail account and password to log in.
- If you do not see this course on your Canvas Dashboard, call the help desk at 590-1188.

VERY TENTATIVE GENERAL SCHEDULE (Most likely will change)

See Canvas Modules for Current Info & Specific Due Dates

Week	Topic	Read this BEFORE class	MAJOR Due Dates
1	Tuesday - Intro		
	Thursday – Lean & Agile	Chapter 1 and “A” All Design- Lean-Agile Readings	Verification of Attendance Quiz Mendix Basic Learning Path
2	Methodologies & planning	Chapters 10 & 11 Agile readings on Canvas	Mendix Module 1
	Requirements Investigation	Chapter 2 Agile readings on Canvas	Teams
3	Uses cases & user stories	Chapter 3 Canvas readings	Mendix Module 2 Set up project in Mendix
			Mendix Module 3
4	Domain Modeling	Chapter 4	
			Mendix Module 4 Initial BMC
5	Domain Modeling		Mendix Modules 5 & 6
			Mendix Modules 7 & 8 Requirements Elicitation Draft
6			
7	Use Case modeling	EXAM 1	
		Chapter 5	Requirements Elicitation Final paper
8	Data Modeling		Mendix Modules 9 & 10 Sprint 1 Deliverable
		Chapter 9	
9	Process Modeling	Chapter “B”	
10	Design	Chapter 6	
		Chapter 8 Mendix Security (Canvas)	
11			
12	OO Design	EXAM 2	
		Chapter 12	Sprint 2 Deliverable
13	OO Design	Chapter 13 (see Canvas)	
			eBikes case Due
14	Deployment	Chapter 14	
THANKSGIVING			
15	Presentations		Sprint 3 Deliverable
FINA EXAM 12/11 – 3:00 – 5:15			