



**COURSE SYLLABUS**  
**Master of Geographic Information Systems**

**GIS 692 – GIS Project Management**  
**Spring 2025**

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### **Course Description**

Examination of project management processes with emphasis on GIS projects. Application of the Project Management Institute (PMI) process groups of project initiation, planning, execution, monitoring and controlling, and closing are integrated with the unique aspects of a GIS project, including agile system requirements, quality control, risks, data management, and system deployment.

### **Learning Objectives**

The objective of this course is to provide students with an understanding of the necessary knowledge, skills, and tools for planning, managing, and monitoring the development of a GIS project. Students will learn how to develop an implementation plan and how to successfully manage the implementation from planning and execution through project closure. The capstone assignment for this course will be a fully developed project implementation plan that includes project scope, schedule, risks, and a quality assurance plan.

This course provides a standardized industry framework to support the planning, designing, and execution of GIS projects. Project management best practices will be combined with the framework to provide students with a practical application approach to managing an individual MIP (or other project) through the project lifecycle.

Class Meetings: Tuesdays and Thursdays 3:00PM – 5:00PM

### **Text/Videos**

ProjectManager.com Instructional Videos

Instructor provided handouts

## **Moodle:**

This course will use Canvas for: Announcements, Course Information & Documents, Assignments and Grades.

## **Grades:**

### **Grade breakdown**

Weekly Assignments	50%
Mid Term Exam	20%
Final Exam	20%
Project Implementation Plan	10%

### **Number/Letter Grading Relationship**

The following scale will be used when calculating final grades:

4.0 (A) 93% - 100%	3.3 (B+) 87% - 89.99%	2.3 (C+) 77% - 79.99%	1.3 (D+) 67% - 69.99%
3.7 (A-) 90% - 92.99%	3.0 (B) 83% - 86.99%	2.0 (C) 73% - 76.99%	1.0 (D) 63% - 66.99%
	2.7 (B-) 80% - 82.99%	1.7 (C-) 70% - 72.99%	0.7 (D-) 60% - 62.99%
			0 (F) <60%

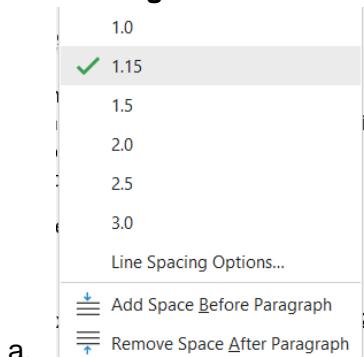
## **Assignment Details:**

There are 9 Weekly Presentation, 11 written weekly assignments in the course, 1 Mid Term Exam and a capstone assignment (in which the student will create a project management presentation either for their MIP (MSGIS track) or a project of their choosing (MGIS track)) or a Final Exam. Students on the day 1 will discuss in the class and will confirm their choice finals.

Detailed reading materials as needed will be posted.

## **Note for written assignments:**

- 1. One page refers to: 8.5 x 11 inch; one inch margins; 12 point Times New Roman. Line spaced setting should like as follows.**



2. Please submit all assignments in Word format unless otherwise stated in the assignment.
3. Citations are not part of 2 pages.
4. Any picture or graphic should be in the appendix not included in the 2-pages.

**Note for presentations:**

1. Presentations will be of 5 minutes for each student.
2. 2 slides max.
3. Slide 1 should talk about what you read (1 min).
4. Slide 2 should talk about your MIP or hypothetical project (1 min).
5. Remaining 3 mins for Q/A

**Scoring:**

Written Assignments: each assignment is of 5 points. Total **55 points**

- Clarity: 1
- Content: 1
- Flow: 1
- Conclusion: 1
- Grammar and spelling: 1

Presentations: each assignment is of 5 points. Total **45 points**

- Slides: 2
- Answers: 1.5
- Questions: 1.5

Mid Term Exam: 50 Points

Final Exam/PM Presentation: 50 Points

**Assignment Submission**

All assignments are to be submitted via the course Canvas site. Due dates for each assignment will be posted in Canvas.

**Late Assignments**

Although you are strongly encouraged to submit all work on time, late work will be accepted up until class begins in Week 15. The penalty for submitting late work is strictly enforced and will be 10% for each day (or fraction of) after the due date. Student is responsible for verifying the successful submission of each assignment, via Canvas.

**Academic Honesty**

While discussion with the instructor, your peers, and your advisor is encouraged to support your submissions, all written work is to reflect independent composition and revision.

**Students with Disabilities**

If you have a disability and need accommodations, please meet with Academic Success & Disability Services (ASDS). The office is located in the Student Development Center on the ground level of the

Armacost Library and can be reached at (909) 748-8069. If you would like to discuss your need for accommodations, please contact ASDS to set up an appointment.

### **Tentative Course Outline and Schedule\*\***

<b>Week</b>	<b>Date</b>	<b>Course Topics</b>	<b>Weekly Assignment (Submission before presentation day)</b>
<b>1. Introduction to GIS Project Management</b>	7-Jan	Let's know each other	1. Read the provided reading material 2. Presentation to be presented on Week 2 3. Write 2-page "What is Project Management to you? And do you have any example of project management in any work you have done (GIS, Non-GIS, House project, etc.)?
		Course Overview	
	9-Jan	Importance of project management in GIS.	
		Roles and responsibilities of a GIS project manager	
		Overview of the GIS project lifecycle.	
<b>2. Planning GIS Projects</b>	14-Jan	Presentations of week 1	1. Read the provided reading material 2. Presentation to be presented on Week 3 3. Write 2-page: Planning of my MIP or hypothetical Project
		project scope, objectives, and deliverables.	
	17-Jan	Stakeholder analysis and engagement.	
		Budgeting and resource allocation for GIS projects.	
		Developing a GIS project timeline and Gantt charts.	
<b>3. GIS Requirements Analysis</b>	21-Jan	Presentations of week 2	1. Read the provided reading material 2. Presentation to be presented on Week 4 3. Write 2-page: Requirements of my MIP or hypothetical Project
		Understanding user requirements and system specifications.	
	23-Jan	Methods for data collection and needs assessment	
		Gap analysis and feasibility studies	
<b>4. Data Management in GIS Projects</b>	28-Jan	Presentations of week 3	1. Read the provided reading material 2. Presentation to be presented on Week 5 3. Write 2-page: Data
		Data acquisition, preparation, and quality control.	
	30-Jan	Metadata creation and standards	

		Managing big data and real-time GIS data. Ethics and privacy considerations in data usage.	Management of my MIP or hypothetical Project
<b>5. System Design and Architecture</b>	4-Feb	Presentations of week 4 System design	1. Read the provided reading material 2. Presentation to be presented on Week 6 3. Write 2-page: System design of my MIP or hypothetical Project
	6-Feb	System architecture	
<b>6. Technology and Tools</b>	11-Feb	Presentations of week 5 Overview of GIS software and tools	1. Read the provided reading material 2. Presentation to be presented on Week 7 3. Write 2-page: Software need of my MIP or hypothetical Project
	13-Feb	Tradition: Mapping, Analysis Emerging technologies: cloud, AI, Visualization	
<b>7. Team Collaboration and Communication</b>	18-Feb	Presentations of week 6 Building effective GIS project teams	1. Prepare for Mid-Term
	20-Feb	Communication strategies for technical and non-technical stakeholders Documentation and reporting best practices	
<b>8a. Risk Management in GIS Projects</b>	25-Feb	Identifying and assessing project risks Mitigation strategies and contingency planning	1. Prepare for Mid-Term
<b>8b. Exam Day</b>	27-Feb	MID TERM EXAM	
<b>9. No Class</b>	4-Mar	SPRING BREAK	1. Read the provided reading material 2. Presentation to be presented on Week 10 3. Write 2-page: Risks and Mitigation plan of my MIP or hypothetical Project
	6-Mar		
<b>10. GIS Standards and Compliance</b>	11-Mar	Presentations of week 8	1. Read the provided reading material 2. Presentation to be presented on Week 11
		Understanding geospatial data standards and interoperability	

	13-Mar	Legal and regulatory considerations Accessibility and usability compliance	3. Write 2-page: Compliance Considerations of my MIP or hypothetical Project
<b>11. Implementing GIS Projects</b>	18-Mar	Presentations of week 10 Strategies for successful project execution.	1. Read the provided reading material 2. Write 2-page: Implementation plan of my MIP or hypothetical Project
	20-Mar	Integrating GIS with other enterprise systems. Managing changes during the project lifecycle.	
	25-Mar	Holiday	
	27-Mar	Developing quality assurance plans. Testing geospatial data and GIS applications. Validating project outcomes against objectives.	1. Read the provided reading material 2. Write 2-page: Testing Plan of my MIP or hypothetical Project
<b>13. Project Closure and Evaluation</b>		Delivering final products and documentation. Measuring project success and ROI.	1. Read the provided reading material 2. Presentation to be presented on Week 14 3. Write 2-page: Project Delivery of my MIP or hypothetical Project
3-Apr	Post-project evaluations and lessons learned.		
8-Apr	Presentations of week 11,12,13	Prepare for Final Exam	
<b>14. Q/A Sessions</b>	10-Apr		Q/A Session
	15-Apr	Make up Session	Prepare for Final Exam
<b>15. Make up Session</b>	17-Apr	Study Day - No Class	
<b>16. Exam</b>	22-Apr	Final Exam	

\*\* Instructor reserves the right to adjust the syllabus.

## College of Arts & Sciences (CAS) Syllabus Statement

The University of Redlands is committed to providing a safe learning environment for all students that is free of all forms of discrimination, sexual misconduct, and sexual harassment, including sexual assault, domestic violence, dating violence, and stalking. If you (or someone you know) has experienced or experiences any of these incidents, know that you are not alone. The University of Redlands has staff members trained to support you in navigating campus life, accessing health and counseling services, providing academic and housing accommodations, no contact orders, and more.

Please be aware all University of Redlands faculty members are “responsible employees,” which means that if you tell me about a situation involving sexual harassment, sexual assault, dating violence, domestic violence, or stalking, I must share that information with the Title IX Coordinator. Although I have to make that notification, you will control how your case will be handled, including whether or not you wish to pursue a formal complaint. Our goal is to make sure you are aware of the range of options available to you and have access to the resources you need.

To report an incident, you can:

- Report online at: [www.redlands.edu/titleix](http://www.redlands.edu/titleix) --> Report
- Contact the Title IX Office at 909-748-8916
  - Title IX Coordinator, Pat Caudle, [pat\\_caudle@redlands.edu](mailto:pat_caudle@redlands.edu) or 909-748-8171
  - Deputy Title IX Coordinator, Erica Moorer, [erica\\_moorer@redlands.edu](mailto:erica_moorer@redlands.edu) or 909-748-8916

If you wish to speak to someone confidentially (meaning not filing with the Title IX Office), you can contact any of the following on-campus resources:

- Counseling Service (<http://www.redlands.edu/student-life/health-and-psychological-services/counseling-center/>, 909-748-8108)
- Crisis Line: 909-748-8960
- Chaplain’s Office (<http://www.redlands.edu/student-life/campus-diversity-and-inclusion/religious-diversity/>, 909-748-8368)

For more information, please visit [www.redlands.edu/titleix](http://www.redlands.edu/titleix)