GIS 104: Introduction to Geographic Information

Syllabus and Course Outline

TERM: YEAR: CLASS MEETING TIMES   ROOM:

COURSE DESCRIPTION

Course Title	GIS 104 Introduction to Geographic Information
Course Description	This course is an introduction to the world of Geographic Information Systems and Remote Sensing. While learning about GIS basics, from the evolution of maps and projections to the modern uses of a GPS, GIS, and Remote Sensing, you will also complete "hands-on" activities to create your own maps. You will also become familiar with the applications of GIS in a special project.
Credits	3
Prerequisites	None
Textbook	**None**
Resources/ Supplemental Materials	Videos and PowerPoint presentations used in class will be posted in Canvas.
Instructor:	

COURSE UNIT DETAILS

Class / Date	ACTIVITIES
Class 01	Class Introduction Geospatial Technology – What it is, why do we study it. How Surveying, Remote Sensing, GPS and GIS work together Materials: PowerPoint slides, web links and Video links.
	How to obtain GPS coordinates on your phone
Class 02	Introduction to GIS Concepts: - GIS Architecture and Components - How GIS organizes and processes data - Examples of GIS applications (Agriculture, Natural Resources Management, Planning and Economic Development, etc.) Materials: PowerPoint Slides, web links and Video Links
	Lab 1: Creating Maps with Google Maps Homework 01 Assigned
Class 03	Introduction to Remote Sensing Concepts - Characteristics - Modes of Acquisition - Acquisition Platforms - Where to obtain Data Materials: PowerPoint Slides, web links and Video Links
	Homework 02 Assigned
Class 04	Class Project Discussion Class Project Examples Introduction to Project Management - 01 Materials: PowerPoint Slides, web links and Video Links
	Lab 2: Digitizing with ArcMap **Quizz 1** – GIS, Remote Sensing & Surveying
Class 05	Introduction to Project Management - 02 Materials: PowerPoint Slides, web links and Video Links
Class 06	Introduction to GPS Technology - How GPS works - Mobile phone GPS apps - GPS applications in Medicine, Agriculture and Natural Resources, Urban development.
	Class Project Plan due Quizz 2 – Project Management
Class 07	**MIDTERM LECTURE** **MIDTERM LAB**

Class 08	Maps - History - Cartography - Elements of a Map - Types of Maps
Class 09	Creating Maps with ArcGIS Lab Lab 3: Evacuation Routes in case of Hurricanes Homework 3 assigned
Class 10	Using ArcGIS On Line Lab 4: Rondonia Deforestation
Class 11 11/21/22	Using ArcGIS On Line Lab 4: Crime Analysis
Class 12	GIS Data Sources and Acquisition Lab 5: Downloading and Using LandSat data
Class 13	**PROJECT WORK**
Class 14	**PROJECT WORK**
Class 15	**PROJECT PRESENTATION**

EVALUATION METHODS

Quizzes: 2	10	No make up quizzes
Homeworks 3	20	
MidTerm Lecture	20	No make up exams unless in case of a valid **documented** excuse. Arrange your travel or vacations not to be on exam dates.
MidTerm Lab	20	
Project	30	
TOTAL	100	

GRADING SCALE Canvas grades **DO NOT** accurately reflect your grade. Please contact your instructor for clarification.

	Letter Grade	Points	
	A	94/0 -100/0	
	A -	90/0 – 93/9	
	B +	87/0 -89/9	
	B	84/0 – 86/9	
	B -	80.0 – 83.9	
	C +	77.0 – 79.9	

	C	70.0 – 76.9	
	D	60.0 – 69.9	
	F	59.9 or below	

ACADEMIC INTEGRITY

Academic integrity is central to the pursuit of education. For students at HCCC, this means maintaining the highest ethical standards in completing their academic work. In doing so, students *earn* college credits by their honest efforts. When they are awarded a certificate or degree, they have attained a goal representing genuine achievement and can reflect with pride on their accomplishment. This is what gives college education its essential value.

 Violations of the principle of academic integrity include:

- Cheating on exams.
- Reporting false research data or experimental results.
- Allowing other students to copy one's work to submit to instructors.
- Communicating the contents of an exam to other students who will be taking the same test. Submitting the same project in more than one course, without discussing this first with instructors. Submitting *plagiarized* work. *Plagiarism* is the use of another writer's words or ideas without properly crediting that person. This unacknowledged use may be from published books or articles, the Internet, or another student's work.

 When students act dishonestly in meeting their course requirements, they lower the value of

Diversity, Equity, and Inclusion Statement

Hudson County Community College (HCCC) fosters a welcoming environment that celebrates and encourages culturally responsive curricula, respects diverse viewpoints, and values discussions without censure or hostility. Our classrooms are strengthened by embracing all student voices and identities. The President's Advisory Council on Diversity, Equity, and Inclusion (PACDEI) encourages students to review DEI resources and initiatives at the following link:

https://myhudson.hccc.edu/teamsites/Pages/pacdei.aspx

Recording Policy

Hudson County Community College prohibits the audio-visual recording, transmission, and distribution of classroom sessions. Classes may only be recorded with the advance written permission of the instructor. The complete classroom recording policy is listed in the student handbook.

STUDENT WORK POLICIES

1. **Late Assignments**

   Assignments are late if they are not posted by 11:59 p.m. E.S.T. on the day they are due. The MindTap platform will not accept late assignments. Technological issues are not considered valid grounds for late assignment submission. In the event of a Canvas outage, students should submit assignments when systems are restored. Unless an Incomplete grade has been granted, assignments submitted after the last day of course will not be accepted.

2. **Temporary Loss of Internet Access**

   If a student's computer is not functioning properly or if there is loss of Internet for a period, it is the student's responsibility to contact their Faculty Members an inform them of the situation.

HCCC Helps

HCCC is committed to supporting students who face non-academic barriers to success. If you are experiencing challenges outside of the classroom that are impacting your academic performance, please visit the Hudson Helps portal page to access additional student supports and resources.

ACCESSIBILITY SERVICES

Hudson County Community College is committed to the creation of an inclusive and safe learning environment for all students. The Office of Accessibility Services is responsible for determining reasonable accommodations for students who encounter barriers due to disability (conditions can include but are not limited to: mental health, attention-related, learning, cognitive/developmental, vision, hearing, physical or health impacts). When the student completes the request process and reasonable accommodations are determined to be necessary and appropriate, an Accommodation Letter (Letter) will be provided. The student must provide the Letter to each course instructor. This should be done as early in the semester as possible as accommodations are not retroactive.

You can contact Accessibility Services by phone at 201-360-4157, by email at as@hccc.edu; visit their website at https://www.hccc.edu/student-success/personal-support/accessibility-services.html or visit them at 71 Sip Avenue, L010/L011, Jersey City, NJ and all information provided will be kept confidential.

DATES/TIMES CAN BE CHANGED AT THE INSTRUCTOR'S DISCRETION