

Midland College
Master Syllabus
Fall 2026

ITNW 1309 – Fundamentals of Cloud Computing (3-1-0)

INSTRUCTOR: Efren Zuniga (Sec. AW01)

COURSE DESCRIPTION

Cloud computing has transformed how organizations deploy, manage, secure, and scale modern information technology infrastructure. This course introduces students to the fundamental concepts, technologies, and practices used in cloud computing environments.

Students will explore cloud service and deployment models, virtualization, compute resources, networking, connectivity, security, identity and access management, storage, databases, monitoring, automation, and cloud system design. The course emphasizes vendor-neutral cloud concepts while also introducing students to technologies and terminology used by major cloud providers such as Amazon Web Services (AWS), Microsoft Azure, and Google Cloud Platform (GCP).

Through readings, MindTap activities, scenario-based exercises, hands-on assignments, discussions, and projects, students will learn both the concepts behind cloud computing and how those concepts are applied in real-world IT environments.

STUDENT LEARNING OUTCOMES

Upon successful completion of the course, students will be able to:

- Explain the fundamental characteristics and benefits of cloud computing.
- Compare public, private, hybrid, multi-cloud, and community cloud deployment models.
- Differentiate between common cloud service models, including IaaS, PaaS, and SaaS.
- Explain virtualization, virtual machines, containers, and serverless computing.
- Identify important considerations when designing and migrating systems to cloud environments.

PARTICIPATION STATEMENT: Students must actively participate by completing an academic assignment by the official census date. Students who do not do so, may be dropped from the course.

REQUIRED COURSE MATERIALS: Will be current. Students should contact their instructor prior to purchasing the text and supplies to confirm required course materials.

STUDENT CONTRIBUTIONS, RESPONSIBILITIES AND CLASS POLICIES: Will be posted by the instructor in individual course syllabus. Students should contact their instructor if they have any questions.

ACADEMIC INTEGRITY: Refer to Midland College's Scholastic Dishonesty and Academic Misconduct policy: <https://www.midland.edu/about/public-info/scholastic-dishonesty.php>

HONORS PROGRAM: Students interested in taking a course for honors credit, should contact their instructor. Refer to the Midland College Honors Program webpage for more details: <https://www.midland.edu/academics/honors.php>

DROPPING THE COURSE: Check the MC College Calendar for the last day to withdraw from the course and receive a “W.” Please talk to the instructor before withdrawing.

EVALUATION OF STUDENTS: Will be posted by the instructor in individual course syllabus. Students should contact their instructor if they have any questions.

NON-DISCRIMINATION STATEMENT: Midland College does not discriminate on the basis of race, color, national origin, sex, disability or age in its programs and activities. For information and inquiries regarding Midland College’s non-discrimination policies, go to:
<https://www.midland.edu/about/tix/index.php>

For further information on notice of non-discrimination, visit the ED.gov Office of Civil Rights website, or call 1 (800) 421-3481.

DISABILITY SUPPORT SERVICES: Any student who, because of a disabling condition, may require some special arrangements to meet course requirements should contact disabilities support services as soon as possible at: <https://www.midland.edu/services-resources/accommodation-services.php>

Conditions may include documented physical or educational disabilities. Please be aware that services or accommodations are not automatic. Each student must request them and secure the proper authorizations/documentation. Accessibility Links can be found on the Pages tab in Canvas.

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