

## Instructor and Section Information

- Instructor Name: Matt Dudlo
- Syllabus date: 1/9/2024
- Office Hours:
  - Wednesday 4:00pm – 4:45pm
  - Online via appointment
- Contact information:
  - Email: [mdudlo@depaul.edu](mailto:mdudlo@depaul.edu)
    - Expect response times within 24 hours. Otherwise, reach out again.
  - Slack channel:
    - [https://join.slack.com/t/depaul-eiv9824/shared\\_invite/zt-2a4jgsa5w-VIM9Hng7ThTjoGM77RsUKg](https://join.slack.com/t/depaul-eiv9824/shared_invite/zt-2a4jgsa5w-VIM9Hng7ThTjoGM77RsUKg)
    - Expect response times within 24 hours. Otherwise, reach out again.
- Class information
  - Quarter: Winter 2023-2024
  - Section Number(s): 802/811
  - Modality: In-person/async
  - Meeting times: Wednesdays 5:45pm to 9:00pm
  - First day of class: Wednesday January 10<sup>th</sup> 2024
  - Last day of class: Wednesday March 13<sup>th</sup> 2024
  - Last Date to Drop and Receive Refund: Please see link below
    - <https://academics.depaul.edu/calendar/Pages/default.aspx>
  - Last Date to Drop this class with a “W” grade: Please see link below
    - <https://academics.depaul.edu/calendar/Pages/default.aspx>

## Course Information

### Course Identification

- Prefix and Number: CSEC 397
- Course Title: Identity and Access Management
- Hours: 4 credit hours
- Prerequisite: N/A

### Course Description

This hands-on course will introduce students to real world IAM applications and scenarios. Students will learn about production IAM use cases and learn how they would integrate in a real-world organization. Technics will be applied to topics such as operating systems, infrastructure, and PKI.



## Expected Outcomes for Student Learning

Students will be able to:

- Understand authentication and authorization core concepts and learn about the various protocols involved and when to use them (via lectures)
- Integrate authentication and authorization technologies and protocols into existing network infrastructure (via labs)
- Create an identity and access management program from the ground up (via final lab)

## Instructor Policies

- All assignments have a due date. Late assignments will NOT be accepted and will receive a 0 with the exception of Labs. Labs will not be accepted after 5 days late. Labs between 0 and 4 days late will receive a point deduction. The Final lab will not be allowed any late submissions.
- All assignments must be submitted via D2L. Assignments via other methods (e.g. email) will NOT be accepted.
- If there is a conflict between due dates (D2L vs syllabus), the syllabus due date will take precedence.
- All students are expected to watch all lectures. Material on exams may come from in class discussions and materials posted on D2L.
- Students are expected to always be courteous of others.
- Students are expected to be prepared and participate in class discussions and labs.
- Students are expected to be focused and paying attention during lecture.
- Students are expected to work well with others during group labs and activities.
- Students are expected to complete all labs, online activities and miscellaneous assignments by the due dates.
- The topical outline is solely at the discretion of the instructor and may be modified at any time to better accommodate class time and schedule.
- Cheating/Plagiarism Policy: Any student caught cheating or plagiarizing will receive zero points for that topic and/or fail class based on Code of Student conduct rules.
- Each student is responsible for adhering to the Code of Student Conduct as stated in the college catalog.
- All grades are final. No extra credit will be given.
- If students are lacking in any of the above-mentioned expectations student's grade may be lowered by one grade level.

## Course Requirements

- Access to Microsoft Word and PowerPoint (or equivalent software)
- D2L will be used as the main interface for the class. Notes, assignments, and all other course material will be posted here. You can access it by going to [d2l.depaul.edu](https://d2l.depaul.edu). Class lectures can also be found here.
- You must have access to a computer system throughout the course that can play zoom videos as well as run a functional web browser capable of video playback.

- Netlabs is the software used for lab access. You can view the requirements for this software here (see Client Internet Connection Requirements):  
[https://www.netdevgroup.com/products/requirements/requirements\\_aepe.html](https://www.netdevgroup.com/products/requirements/requirements_aepe.html)
- Software Required: Web Browser (Chrome Recommended), Poll Everywhere, Slack (all free)

## Classroom Information

### Topical Outline

Week	Topic	Assignments Due
Week 1	Course intro, syllabus review, expectations, IAM Fundamentals, introductory topics	<ul style="list-style-type: none"> <li>• N/A</li> </ul>
Week 2	IAM Fundamentals, introductory topics(cont.), LAB 1 Demo	<ul style="list-style-type: none"> <li>• Discussion Board 1</li> <li>• Quiz 1</li> </ul>
Week 3	PKI Fundamentals, LAB 2 Demo	<ul style="list-style-type: none"> <li>• LAB 1</li> <li>• Discussion Board 2</li> <li>• Quiz 2</li> </ul>
Week 4	LDAP, Kerberos & Active Directory, LAB 3 Demo	<ul style="list-style-type: none"> <li>• LAB 2</li> <li>• Discussion Board 3</li> <li>• Quiz 3</li> </ul>
Week 5	Identity Federation: SAML and OIDC, LAB 4 Demo	<ul style="list-style-type: none"> <li>• LAB 3</li> <li>• Discussion Board 4</li> <li>• Quiz 4</li> </ul>
Week 6	LAB Week, Mid-term	<ul style="list-style-type: none"> <li>• LAB 4</li> <li>• Discussion Board 5</li> </ul>
Week 7	Identity Provider Hosting Options, LAB 5 Demo	<ul style="list-style-type: none"> <li>• Mid-term Lab</li> </ul>
Week 8	Network Security IAM Integrations, LAB 6 Demo	<ul style="list-style-type: none"> <li>• Lab 5</li> <li>• Discussion Board 6</li> <li>• Quiz 5</li> </ul>
Week 9	Putting it all together, Begin Final LAB	<ul style="list-style-type: none"> <li>• Discussion Board 7</li> <li>• LAB 6</li> </ul>

Week 10	LAB week	<ul style="list-style-type: none"> <li>• N/A</li> </ul>
Finals Week	Class Review/Wrap-up	<ul style="list-style-type: none"> <li>• Final LAB Due</li> </ul>

### Books, Supplies and Supplementary Materials

- Required Textbooks:
  - Pro Active Directory Certificate Services: Creating and Managing Digital Certificates for Use in Microsoft Networks
    - <https://learning.oreilly.com/library/view/pro-active-directory/9781484274866/>
  - Solving Identity Management in Modern Applications: Demystifying OAuth 2, OpenID Connect, and SAML 2
    - <https://learning.oreilly.com/library/view/solving-identity-management/9781484282618/>
  - Keycloak - Identity and Access Management for Modern Applications - Second Edition
    - <https://learning.oreilly.com/library/view/keycloak-identity/9781804616444/>

### Classroom Policies and Procedures

- College Statement about grades of 'F' and withdrawal from class.
  - A student who does not withdraw officially from a course may receive a grade of 'F' or 'Fx', depending on course progress of course attendance, which will become a part of the student's permanent record. The withdrawal date is listed in the General Information sheet.
- Final Exam Information
  - The final exam will be tentatively released on the 2nd to last day of class.
- Attendance Policy
  - Attendance is not required, but material review (including watching lectures) is. Not all required material is documented in lecture notes and examples, and important information will be conveyed verbally during lecture. Excessive absence and skipping of material can affect final grade. (see class participation in grading section). You are responsible for all material covered, assignments delivered or received, and announcements made in class sessions that you miss. All students are required to watch the class lecture, either online or in person.
- Academic Integrity and Plagiarism
  - Cheating and plagiarism are not allowed in this class. This is defined as copying another's work and using it as your own (even if you reword it). You are free to get ideas from other sources (books, internet, etc), but you are by no means

authorized to copy their work and you must cite the original sources from which your ideas stemmed. Any student caught in the act of cheating/plagiarism will be penalized based on the severity of the offence up to and including:

- Minimally, any violation will incur:
  - Automatic 0% on the assignment
- Depending on the severity of the violation, the penalty may also include:
  - Immediate dismissal from class
  - Result in a grade of 'F' in the course
  - Academic Integrity violation being filed
- Use of Generative AI
  - The use of generative AI tools is permitted in this course for the following activities:
    - Brainstorming ideas
    - Fine tuning your research questions
    - Exploring what you need to learn about your topics
    - Drafting outlines
    - Checking grammar
    - Generating correct command syntax
    - Code examples
  - If you use generative AI in any of the above ways, please describe the tools you used, and how you used them, at the end of your discussion post, assignment, or essay. Please include the prompts you provided to the generative AI tools.
  - The use of generative AI tools is prohibited in this course for the following assignments and activities:
    - Any multiple choice, fill in the blank, multi-select, or short answer question assignments
    - Composing discussion board posts and responses
    - Writing reflections, including exit tickets and process logs
    - Writing drafts of a writing assignment
    - Writing paragraphs used to complete any assignments
    - Completing entire coding assignments
  - If you are unsure if a specific tool or use of AI is permitted, please contact me.
  - Using generative AI in a way that is not permitted is considered a violation of DePaul's Academic Integrity Policy.
  - AI responses should not make up more than 20% of your overall assignment.

#### Graded Assignments and Policies

- 1750 point total consisting of:
  - Labs – 600 points
  - Quizzes – 200 points
  - Discussion Boards – 350 points

- Midterm Lab – 200 points
- Attendance – 100 points
- Final – 300 points
- **Grading Scale**  
Grading for courses in this program is as follows:

A	93+ pts	C+	77 – 79.99 pts
A-	90 – 92.99 pts	C	73 – 76.99 pts
B+	87 – 89.99 pts	C-	70 – 72.99 pts
B	83 – 86.99 pts	D+	67 – 69.99 pts
B-	80 – 82.99 pts	D	63 – 66.99 pts
		F	<63 pts

### University Policies

- **Changes to Syllabus**
  - This syllabus is subject to change as necessary during the quarter. If a change occurs, it will be thoroughly addressed during class, posted under Announcements in D2L and sent via email.
- **Respect for Diversity and Inclusion at DePaul University as aligned with our Vincentian Values**
  - At DePaul, our mission calls us to explore “what must be done” in order to respect the inherent dignity and identity of each human person. We value diversity because it is part of our history, our traditions and our future. We see diversity as an asset and a strength that adds to the richness of classroom learning. In my course, I strive to include diverse authors, perspectives and teaching pedagogies. I also encourage open dialogue and spaces for students to express their unique identities and perspectives. I am open to having difficult conversations and I will strive to create an inclusive classroom that values all perspectives. If at any time, the classroom experience does not live up to this expectation, please feel free to contact me via email or during office hours.
- **Online Course Evaluations**
  - Evaluations are a way for students to provide valuable feedback regarding their instructor and the course. Detailed feedback will enable the instructor to continuously tailor teaching methods and course content to meet the learning goals of the course and the academic needs of the students. They are a requirement of the course and are key to continue to provide you with the highest quality of teaching. The evaluations are anonymous; the instructor and administration do not track who entered what responses. A program is used to check if the student completed the evaluations, but the evaluation is completely separate from the student’s identity. Since 100% participation is our goal, students are sent periodic

reminders over three weeks. Students do not receive reminders once they complete the evaluation. Please see: <https://resources.depaul.edu/teaching-commons/teaching/Pages/online-teaching-evaluations.aspx> for additional information.

- Academic Integrity and Plagiarism

- This course will be subject to the university's academic integrity policy. All students are expected to abide by the University's Academic Integrity Policy which prohibits cheating and other misconduct in student coursework. Publicly sharing or posting online any prior or current materials from this course (including exam questions or answers), is considered to be providing unauthorized assistance prohibited by the policy. Both students who share/post and students who access or use such materials are considered to be cheating under the Policy and will be subject to sanctions for violations of Academic Integrity.
- More information can be found at <https://resources.depaul.edu/teaching-commons/teaching/academic-integrity/Pages/default.aspx>.
- Posting work on online sites, such as Hero
- All students are expected to abide by the University's Academic Integrity Policy which prohibits cheating and other misconduct in student coursework. Publicly sharing or posting online any prior or current materials from this course (including exam questions or answers), is considered to be providing unauthorized assistance prohibited by the policy. Both students who share/post and students who access or use such materials are considered to be cheating under the Policy and will be subject to sanctions for violations of Academic Integrity.

- Academic Policies

- All students are required to manage their class schedules each term in accordance with the deadlines for enrolling and withdrawing as indicated in the University Academic Calendar. Information on enrollment, withdrawal, grading and incompletes can be found at:  
<http://www.cdm.depaul.edu/Current%20Students/Pages/PoliciesandProcedures.aspx>

- Incomplete Grades

- An incomplete grade is a special, temporary grade that may be assigned by an instructor when unforeseeable circumstances prevent a student from completing course requirements by the end of the term and when otherwise the student had a record of satisfactory progress in the course. All incomplete requests must be approved by the instructor of the course and a CDM Associate Dean. Only exceptions cases will receive such approval. Information about the Incomplete Grades policy can be found at  
<http://www.cdm.depaul.edu/Current%20Students/Pages/Grading-Policies.aspx>





- Absence Notifications
  - Students who miss class due to illness or significant personal circumstances may complete the [Absence Notification](#) form through the Dean of Students office. Students must submit supporting documentation alongside the form. The professor reserves the sole right whether to offer an excused absence and/or academic accommodations for an excused absence.
- Preferred Name & Gender Pronouns
  - Professional courtesy and sensitivity are especially important with respect to individuals and topics dealing with differences of race, culture, religion, politics, sexual orientation, gender, gender variance, and nationalities. I will gladly honor your request to address you by an alternate name or gender pronoun. Please advise me of this preference early in the quarter so that I may make appropriate changes to my records. Please also note that students may choose to identify within the University community with a preferred first name that differs from their legal name and may also update their gender. The preferred first name will appear in University related systems and documents except where the use of the legal name is necessitated or required by University business or legal need. For more information and instructions on how to do so, please see the Student Preferred Name and Gender Policy at <http://policies.depaul.edu/policy/policy.aspx?pid=332>
- Students with Disabilities
  - Students seeking disability-related accommodations are required to register with DePaul's Center for Students with Disabilities (CSD) enabling them to access accommodations and support services to assist with their success. There are two office locations:
    - Loop Campus (312) 362-8002
    - Lincoln Park Campus (773) 325-1677
    - Email: [csd@depaul.edu](mailto:csd@depaul.edu)
  - Students who register with the Center for Students with Disabilities are also invited to contact Dr. Gregory Moorhead, Director of the Center, privately to discuss how he may assist in facilitating the accommodations to be used in a course. This is best done early in the term. The conversation will remain confidential to the extent possible.
    - Please see <https://offices.depaul.edu/student-affairs/about/departments/Pages/csd.aspx> for Services and Contact Information.