June payday will return to June[1]

University of Colorado employees who are paid monthly will now receive their June paycheck on the final business day in June, instead of the first business day in July.

The change comes after Robert Jaros, state of Colorado controller, released an alert stating that a 15-year-old state directive, which delays all monthly paid state employees' June pay to the first business day in July, no longer applies to higher education institutions.

"The payroll and finance teams are happy to have this change, but, I imagine, not as happy as all the monthly paid employees," said Sharon Bishop, director of payroll for Employee Services. "We'll no longer need to adjust any automatic payments that come out of our bank accounts on the last day of the month for our June pay."

The one-day pay shift was implemented in 2003, when Gov. Bill Owens signed into law Senate Bill 03-197. The change eliminated one of the state's 12 monthly pay cycles during fiscal year 2002-03, and saved the state $90 million in general fund expenditures, according to the Colorado Office of State Planning and Budgeting.

There is no change for employees who are paid biweekly.

To view 2018 monthly and biweekly paydays, click here.[2]

Five questions for Michael Mozer[3]
[4]

Developing ways to optimize the power of learning, both for man and machine, has been a focus of Michael Mozer's research for many years. Mozer, a professor in the Department of Computer Science and Institute of Cognitive Science (ICS) at CU Boulder, is studying the most effective ways of teaching so that humans can better consume and retain information. He's also researching and testing tools that can make computers smarter and easier to use.

Mozer came to CU in 1988, when the university was one of the few schools in the country where faculty were doing research in neural networks, which are computer systems modeled on the human brain.

"Sadly, faculty in that area moved on, and for many years it was difficult to convince my colleagues that neural networks were a worthy area of research," he said. "Now, of course, the AI (artificial intelligence) revolution is based on exactly the same neural network approaches we were exploring around 1990. You may have heard the term 'deep learning,' which is just a modern rebranding of neural nets. With faster computers and bigger data sets, the methods seem to work."

1. How do the tools you are developing to improve human capabilities work? Why do humans – with our big brains – need them?

The best way to explain how the tools operate is by analogy to what online shopping sites do to make product recommendations. They collect data from a large population of customers purchasing a variety of products, and they use these data to recommend specific products to a particular individual. We do the same thing, except the recommendations concern what material a student ought to study, or incentives or guidance we might offer an individual to support better decision making. Our work involves three components: first, a means of quantifying optimality; second, large data sets of human behavior; and third, theories of human perception and cognition.

People need help learning because we have lapses of attention. A radiologist may miss detecting an anomaly on an X-ray. People have lapses of willpower: Students often skip class even when they know it is in their long-term interest to attend. And sometimes, we just have poor intuitions about how our minds work; for example, how and when to study material for long-term knowledge retention.

By the way, as an illustration of our poor intuitions, there is no solid evidence supporting the notion of different learning styles (Pashler, McDaniel, Rohrer, and Bjork, 2009), at least in the sense that people who consider themselves visual or auditory learners actually learn better with that style of instruction. It's possible that if the style of instruction was chosen not based on an individual's intuitions, but on the specific content of the material and specific history of the individual, there may actually be benefits. This is the type of question one can answer only with data and modeling.

2. Another project you are involved with is "temptation avoidance," where incentives are used to keep people on track to meet long-term goals. How is this research done and what have you found?

Shruthi Sukumar did this work for her master's thesis. We constructed a simple video game that simulated waiting in queues. If the player waits in a long, frustrating queue, they get a big payoff (per unit time), but if they jump to a short, painless queue, they get a smaller payoff. Even though the optimal strategy is to wait in the long queue, players often give up. After playing for a few minutes, we automatically construct a model of the player's behavior, and using the model, we can predict an incentive structure that will maximize their expected payoffs. These incentives involve small rewards, kind of like offering a dieter a healthy snack at the moment they're about to succumb to temptation. Although generic incentivizing schemes are used in behavioral economics (e.g., prize-linked savings accounts), our focus is on customizing incentives for an individual.

3. As you study ways to optimize human learning, one of your project focuses on helping achieve "durable memory." What is durable memory and what does this research entail?

All human memory decays. Durable memories decay more slowly. The goal of our research is to slow the inevitable forgetting.

Pretty much everyone has heard the advice not to cram for an exam and that it's better to distribute study over larger windows of time. That advice turns out to be wrong if your goal is to do well on the exam, but it's right if you want to slow forgetting. We're starting a project with researchers at Quizlet, an online flashcard app that has millions upon millions of users, predicting an individual's rate of forgetting given their study history. Once we can model forgetting, we can use the model to prescribe optimal schedules of study in a precise, quantitative manner. We've done similar work on a smaller scale, with a group of 300 middle-school, Spanish-language students. A month after the semester ended, we found that using our adaptive training scheme achieves a nearly 17 percent boost in retention over a time-matched scheme that is representative of current educational practice.

4. One of your early projects was an "adaptive house" and you are currently working to gather data from digital textbooks. What is the status of each of those projects?

My 15 minutes of fame was a project in the 1990s where we equipped my house with sensors and actuators, and the house learned my habits and learned to control energy resources to both maximize my comfort and minimize energy consumption. We had a paper called the Adaptive Thermostat, written about 20 years before the Nest thermostat came along, and our system actually worked a lot better and was more intelligent than the Nest. The system also controlled lighting in a predictive manner, so that when you got up from the living room couch, it would anticipate — based on the context and an individual's past behavior — that you were headed to the bedroom, and a lighting path would turn on. I kept the system running until there was a nasty lightning storm that fried most of the electronics. (To learn more, visit http://www.cs.colorado.edu/~mozer/index.php?dir=/Research/Projects/Adaptive%20house/[5])

The digital textbook project is just getting underway. We're collaborating with an open-access textbook foundation (visit openstax.org[6]) to instrument their electronic texts to collect data from students as they make initial contact with material. We record, for example, how long they look at a page and which sentences they highlight. The goal is to use these behaviors as early indicators of difficulties in understanding and particular topics of interest to that student. The textbooks will incorporate automatic quizzing, the purpose of which is to improve comprehension of the material.

My colleague Sidney D'Mello in ICS does related work. He has shown that when students' minds wander, their reading times decouple from the intrinsic difficulty of the material. We hope to leverage relationships like this to optimize the student's time and focus. (To learn more about the digital textbook project,

visit http://tdlc.ucsd.edu/research/DNS/videos/Mozer.mp4[7])

5. What aspect of your work do you enjoy most – figuring out how humans learn (think, etc.) or figuring out how to make machines (like your adaptive house) smarter? Why?

The two go hand in hand, in my view. It's easy to make a machine smart at a specific task, such as detecting cats in YouTube videos, but machines do not have the flexibility and general cognitive abilities of people. We have a few examples where insights into the human mind and brain have proven useful for building smarter machines, but I think many more are to come.

Proposed CU budget: salary merit pool, low tuition increases[8]

CU's proposed 2018-19 budget includes minimal tuition increases and a 3 percent salary merit pool that is consistent with the governor's state budget request.

The Board of Regents reviewed the proposal during the Feb. 8 meeting at CU South Denver.

"The budget priorities are consistent with leadership's priorities of the past," said Todd Saliman, vice president of budget and finance and chief financial officer, who presented the details.[9] "The first of those priorities is maintaining affordability by keeping tuition increases as low as possible."

As proposed, tuition and fees for typical undergraduates would increase 1.2 percent at CU Denver, 2.6 percent at UCCS and 4 percent at CU Boulder for freshmen and transfer students only. The guarantee of no tuition increase remains in place for continuing students at CU Boulder. With the elimination of some course and program fees, many students will see a decline in costs.

Gov. John Hickenlooper's state budget as proposed in November calls for 3 percent salary increases for state employees. The CU proposal echoes that with a 3 percent merit pool, the highest level in three years.

"We're very grateful for the governor's budget request," Saliman said.

The board likely will vote on the tuition and salary proposals in April; the final budget is not voted on until June, after the state budget has been set by the legislature.

Online education plan gains momentum[10]
[11]

At its November board meeting, the CU Board of Regents approved a progressive $20 million proposal to implement the university's online education goals over the next four years, including a fully online bachelor's degree costing $15,000. At its Feb. 8 meeting at CU South Denver, the board approved the timetable and framework to greatly expand and solidify CU's online education presence.

While the timeline is ambitious overall, one of the main areas of focus will be the $15,000 bachelor's degree, said Regent Stephen Ludwig, D-Denver.

"That comes out to $125 per credit hour, all-in, including books," Ludwig said. "This will require new thinking, new technology, new pedagogy, new ways of doing advising and student support, and new commitments to make it happen.

“If we tap our collective brain power, I'm sure we can solve the issues that achieving a $15,000 degree present.”

The first deadline for the new structure is June 1, when the information technology governance representative will provide the board’s University Affairs Committee a plan with specific actions, timelines, measurable outcomes and more. The lion’s share of the online degree programs are slated to launch Sept. 1, 2022.

At their November meeting, the regents unanimously praised the initial plan, citing overwhelming need and the benefits that fully online programs offer rural communities, working individuals and military personnel. They stressed, however, the importance of seeing the proposal through to fruition. The timeframe approved last week is a large step in that direction.

“It was truly a joint effort,” said Ludwig, who introduced the initiative in 2017. “The regents worked together to provide strategic guidance. The administration worked to ensure that the effort moved forward with proper input from campus leadership. The chancellors selected which of the initiative goals best aligned with their campus’s strengths and mission.

“In the end, this initiative will provide each campus greater flexibility to meet the changing needs of current students and provide new opportunities to those that are being priced out of higher education.”

The online programs will be governed at the campus level. The leads for each campus include William Kuskin, CU Boulder; Harper Johnson, CU Colorado Springs; and Scot Chadwick, CU Denver | Anschutz. But engagement for the online programs will extend to all corners of all campuses, Ludwig said.

“We have brilliant faculty who work to solve the world’s problems, unlock the mysteries of the universe, seek cures for diseases, patch back together broken bodies, look deep into the human psyche, create amazing works of art, design fantastic buildings, create virtual worlds, and inspire us with new ways of thinking,” Ludwig said. Although it will not be easy, “The only true barrier is the will to get it done.”

 See the full presentation here.[12]

CU to offer first MOOC-delivered electrical engineering master’s[13]

The CU Board of Regents last week unanimously approved a new and innovative MOOC-delivered master’s degree in electrical engineering – the first of its type in the world.
[14]

“It is an entire M.S. degree program, rather than a simple MOOC,” said Robert Erickson, professor of power electronics and renewable energy systems at CU Boulder. “In that sense, it is pretty revolutionary.”

The on-demand, asynchronous and fully online degree, to be offered by the Department of Electrical, Computer, and Energy Engineering (ECEE) within the College of Engineering and Applied Science, will provide high-quality graduate education to students around the world in response to growing workforce demand.

The degree, which is subject to authorization by the Higher Learning Commission (HLC), is slated to launch in fall 2018 with additional curriculum rolling out in 2018-19.

“The MOOC-based electrical engineering master’s degree really captures the spirit of ingenuity, entrepreneurship and creativity of the faculty at CU Boulder,” said Provost Russell Moore. “In every discipline on campus, our faculty are looking at new ways to teach and conduct research mindful of the benefits for Colorado, the nation and the world. We look forward to presenting this unique degree to the HLC for authorization with all these benefits in mind.”

The MOOC-based Master of Science in Electrical Engineering leverages advanced online learning platform

technologies to offer a rigorous degree at a lower cost, giving students a choice in how, when and where they complete their coursework.

“What excites me about this initiative is that we’re using technology thoughtfully and strategically to create something new – an online degree that doesn’t try to mimic the classroom experience,” said William Kuskin, vice provost and associate vice chancellor for strategic initiatives. “We want to use the digital environment to let learners explore a sophisticated academic curriculum at their own pace.

“Our hope is that we will deliver an online degree that can only exist in the online environment, unique to this modality, and by doing that, deliver some powerful teaching to the entire world.”

CU Boulder Graduate School faculty have custom-designed each course. Courses feature in-depth video content, curated readings and resources, and assessments that challenge students to demonstrate their mastery of the subject area. Many courses bring the laboratory experience out of the Engineering Center to MOOC students around the world, inviting students to apply their knowledge using hardware and software kits at home. The curriculum pushes the limits of automation in MOOCs to scale graduate education and capture the energy of a rapidly evolving field.

“The faculty have seized the moment and created something truly imaginative,” Kuskin said, “an online degree where each course bears the idiosyncratic mark of its creator.”

In a field of peer institutions working in the for-credit MOOC space – including MIT, Georgia Tech and the University of Illinois at Urbana-Champaign – CU Boulder takes a leadership position in the electrical engineering master’s space.

“Expanding access to the technological world and increasing our global engagement is what our college is all about,” said Bobby Braun, dean of the College of Engineering and Applied Science. “Through this new degree program, I’m excited to see the department leading our college and university – and really the nation – with this 21st century approach to education.”

Learn more about the latest electrical engineering MOOCs at CU Boulder.[15]

Regents approve changes to Regent Laws’ Article 12[16]

The Board of Regents last week approved changes to Regent Laws’ Article 12: Tuition, Fees, Scholarships, and Loans and the related Regent Policies 12.A: Student Tuition; 12.B: Student Fees; and 12.C: Student Financial Aid.

The changes were effective Feb. 8.

For more detailed information, go to http://www.cu.edu/regents/rlpreview[17].

Regents notes: Discussion of emerging issues; athletics contracts[18]

The CU Board of Regents plans to set aside an hour at each regular meeting to discuss emerging issues that could become relevant to the university, an initiative that came out of last month’s winter retreat.

“This is intended to give us the ability to talk about topics that may not be on the agenda, but are things that we should discuss,” said Board Chair Sue Sharkey, R-Castle Rock. “We’ll want to balance the free-flow exchange of ideas and keeping ourselves on track.”

The topic was discussed during the board’s Feb. 8 meeting at CU South Denver.

Patrick O'Rourke, vice president of University Counsel and secretary to the board, said the allotted time will allow for longer-term discussions on issues that should be on the board's radar screen. Before each meeting, the regents' office will identify a set of issues to discuss, and materials on the topic will be provided as a foundation for the conversations, he said.

A subject matter expert will be invited to facilitate the discussions, O'Rourke said. He stressed that the topics should not have an action item attached.

The board briefly noted the types of topics they envision discussing during the time provided for emerging issues: Promoting a culture critical thinking. Artificial intelligence and its possibilities in higher education. On-campus issues that affect students including mental health. Rural vs. urban education and its impact on CU.
In other business at the Feb. 8 meeting:
The board approved multi-year contracts for 20 athletics head coaches, associate coaches and assistant coaches, including an extension through 2023 for Tad Boyle, CU Boulder head men's basketball coach. This follows CU's legislative initiative of last year that resulted in the passage of Senate Bill 17-041, which enables more flexibility by exempting contracts for positions funded by revenue from auxiliary activities, such as athletics. The board voted 7-1, with Regent Linda Shoemaker voting no and Regent Heidi Ganahl absent. "We go from a competitive disadvantage to being competitive and that's important," said CU Boulder Athletic Director Rick George. "The support that we got from the regents and the chancellor (Phil DiStefano) to get this done is incredible. We're appreciative of that because it allows us to now be on a level playing field with our peers." Read more at cubuffs.com.[19]
During his report on the University Affairs Committee, Regent John Carson, R-Highlands Ranch, said he's awaiting information from the campuses on "whether students are getting the information they need to be competent and knowledgeable in government and civics." He cited a report from the American Council of Trustees and Alumni – "What Will They Learn?"[20] – which details how public and private colleges and universities fail to require students to demonstrate fundamental skills and knowledge. Among those institutions examined, 87.9 percent do not require intermediate-level foreign language; 82.4 percent don't require a basic course in U.S. government or history; 41.9 percent of students can graduate without taking a college-level mathematics course; and 18.8 percent can leave without a basic course in English composition.

Cathy Beuten and Jay Dedrick

2018 W-4 release delayed due to tax rate changes[21]

The passage of the Tax Cuts and Job Act of 2017 has implications for University of Colorado faculty and staff. Among them: slightly larger paychecks and a delay in the release of the 2018 Form W-4.

Paycheck amounts

When viewing their January paychecks, many employees noticed that they were larger than usual. "That's because the recently passed tax bill changed tax rates for many income levels, typically resulting in larger paychecks," said Sharon Bishop, director of payroll for Employee Services.

2018 W-4 delay

Tax changes passed in December also delayed the IRS's release of the 2018 W-4 until Feb. 28.

The W-4 allows employees to determine the amount of federal income tax withheld from their pay. Employee Services recommends that all employees check their W-4 and make any needed adjustments at the start of each year – especially if an employee got married, had a child or experienced other changes that would affect their tax status.

The IRS delay means employees and new hires can continue using the 2017 W-4 for 30 days after the new one is available. Employees who claimed tax-exempt in 2017 will have their exemption extended until Feb. 28.

Bishop encourages faculty, staff and student employees to continue to review the federal and state withholdings on their paychecks until the IRS releases the new W-4 form and online withholding calculator. Employee Services will share news of its release through campus communications channels.

“I highly encourage everyone to take advantage of the IRS calculator tool to see how change to the tax laws will affect them,” Bishop said. “It will help to make sure you will not owe taxes when you complete your 2018 tax return.”

When released, the IRS withholding calculator will be available at IRS.gov/W4App[22]. The IRS anticipates that this calculator will be available by the end of February.

Feminists, formerly incarcerated and foodies headline 2018 Conference on World Affairs [23]

Jane Goodall to teach newest MOOC on developing compassionate leaders[24]

CNN’s Anderson Cooper to speak at March 6 CU event [25]

Photo Feature: Ent gala draws community supporters[26]

Milo Mile promotes campus community [27]

CU experts show reducing unintended pregnancies saves state money[28]

Gatlin named Employee of the Quarter[29]

Three finalists named for CU Boulder dean of University Libraries [30]

Gloor in tune with student success [31]

Links
[1] https://connections.cu.edu/stories/june-payday-will-return-june[2] http://www.cu.edu/employee-services/paydays[3] https://connections.cu.edu/spotlights/five-questions-michael-mozer[4] https://connections.cu.edu/sites/default/files/mozer_01.jpg[5] http://www.cs.colorado.edu/~mozer/index.php?dir=/Research/Projects/Adaptive%20house/[6] https://openstax.org/[7] http://tdlc.ucsd.edu/research/DNS/videos/Mozer.mp4[8] https://connections.cu.edu/stories/proposed-cu-budget-salary-merit-pool-low-tuition-increases[9] https://www.boarddocs.com/co/cu/Board.nsf/vpublic?open[10] https://connections.cu.edu/stories/online-education-plan-gains-momentum[11] https://connections.cu.edu/sites/default/files/cu-online-degree-program-timeline_sidebar.png[12] https://www.boarddocs.com/co/cu/Board.nsf/files/AV47RR121833/$file/Online%20Resolution%20Part%202_%20PowerPoint.pdf[13] https://connections.cu.edu/stories/cu-offer-first-mooc-delivered-electrical-engineering-master-s[14] https://connections.cu.edu/sites/default/files/mooc_ele-eng_erikson.jpg[15] https://www.colorado.edu/ecee/online-ms-ee[16] https://connections.cu.edu/stories/regents-approve-changes-regent-laws-article-12[17] https://www.cu.edu/regents/rlpreview[18] https://connections.cu.edu/stories/regents-notes-discussion-emerging-issues-athletics-contracts[19] http://cubuffs.com/news/2018/2/9/general-woelk-ending-limit-on-multi-year-contracts-a-strong-positive-step-for-cu.aspx?path=football[20] https://www.goacta.org/publications/what-will-they-learn-2017-18[21] https://connections.cu.edu/stories/2018-w-4-release-delayed-due-tax-rate-changes[22] https://www.irs.gov/individuals/irs-withholding-calculator[23] https://connections.cu.edu/stories/feminists-formerly-incarcerated-and-foodies-headline-2018-conference-world-affairs[24] https://connections.cu.edu/stories/jane-goodall-teach-newest-mooc-developing-compassionate-leaders[25] https://connections.cu.edu/stories/cnn-s-anderson-cooper-speak-march-6-cu-event[26] https://connections.cu.edu/stories/photo-feature-ent-gala-draws-community-supporters[27] https://connections.cu.edu/stories/milo-mile-promotes-campus-community[28] https://connections.cu.edu/stories/cu-experts-show-reducing-unintended-pregnancies-saves-state-money[29] https://connections.cu.edu/people/gatlin-named-employee-quarter[30] https://connections.cu.edu/people/three-finalists-named-cu-boulder-dean-university-libraries[31] https://connections.cu.edu/people/gloor-tune-student-success