**Management 425-2T**

**Human Resource Analytics**

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**OFFICE HOURS**: Tuesday & Thursday: 8:30AM–9:00AM, 10:20AM–12:00PM; 1:20PM–4:00PM

Friday: 9:00–9:20AM

**DEPARTMENT HEAD:**                     Dr. Ken Chadwick

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**DEPARTMENT OFFICE HOURS**:  Monday-Friday 8:00 am – 4:30 pm

**Syllabus Revision Statement:**

This syllabus is subject to revision, but not without prior notice by the instructor*. (Must be documented with revision date.)*

**Catalog Description**: Training in HR analytics software to improve business strategy execution.

*Detailed Course Description:*

Welcome to HR Analytics! You will learn the basics of how to use HR analytics to help organizations better execute their strategies. This key skill you will learn is how to use R to conduct predictive analytics.

**Prerequisites for Course**: MNGT 301 or equivalent.

**AoL Puzzle Insert:** Not Applicable

**Required Text and Other Materials**:

Edwards, M. R., & Edwards, K. (2019). *Predictive HR Analytics: Mastering the HR Metric* (2nd ed.). Kogan Page. ISBN-13: ‎978-0749484446 [[But from Amazon](https://www.amazon.com/Predictive-HR-Analytics-Mastering-Metric/dp/0749484446/ref=asc_df_0749484446/?tag=hyprod-20&linkCode=df0&hvadid=344057888328&hvpos=&hvnetw=g&hvrand=9916753456217866499&hvpone=&hvptwo=&hvqmt=&hvdev=c&hvdvcmdl=&hvlocint=&hvlocphy=9025167&hvtargid=pla-655178063481&psc=1&tag=&ref=&adgrpid=69543898472&hvpone=&hvptwo=&hvadid=344057888328&hvpos=&hvnetw=g&hvrand=9916753456217866499&hvqmt=&hvdev=c&hvdvcmdl=&hvlocint=&hvlocphy=9025167&hvtargid=pla-655178063481)]

*Note*: The textbook will make use of two analytics tools: SPSS and R. Although we should have SPSS installed on a lab computer (which may be useful for both expanding your skillset and following along with the textbook), I will be making use of only of R and RStudio. The textbook does provide all R-relevant code for each chapter.

**Student Learning Outcomes**:

By the end of this course, students will be able to speak with a basic level of expertise in predictive HR analytics. Specific HR analytics skillsets include

1. Students will be able to demonstrate an understanding of HR analytics, HR information systems and data, and general analysis strategies
2. Students will be able to analyze organizational diversity (e.g., ethnicity, gender)
3. Students will be able to assess and analyze data on employee attitudes
4. Students will be able to build a statistical model for predicting employee turnover
5. Students will be able to predict employee performance
6. Students will be to use analytics to examine recruitment and selection processes
7. Students will be able to use analytics to monitor the impact of interventions on outcomes that matter (e.g., stress, value-change, performance)
8. Students will be able to model different business scenarios (e.g., the potential impact of training programs)

**Course Content**:

**SAMPLE COURSE SCHEDULE**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Wk** | **Topic** | **Readings** | **Deliverables** | |
| 1 | Course Introduction, Understanding the many forms of HR Analytics | Ch. 1 | * [Week 1 PPA](https://docs.google.com/document/d/1cxW-Gg382KVKFBbOSqmbTz-yicCUw02DtQglL8BcDms/edit?usp=sharing) * Team Contract Due End of Week | |
| 2 | HR Information Systems (HRISs) and Data, Introduction to R, RStudio | Ch. 2 | [Week 2 PPA](https://docs.google.com/document/d/1L2cqQHLWnWLblADxcTjm9QRRhnpR8_3Cff1UqBazoEg/edit?usp=sharing) | |
| 3 | Analysis Strategies | Ch. 3 | [Week 3 PPA](https://docs.google.com/document/d/1hNT0GSwEHvbMX-d8cSkuLmM_1C7SoRA9dIx_4R1tpYo/edit?usp=sharing) | |
| 4 | Case Study 1: Diversity Analytics | Ch. 4 | [Week 4 PPA](https://docs.google.com/document/d/15w6T6fBcpu0Ay9XVy2yogWDHoK-PTtXIrkBV2Hd1e40/edit?usp=sharing) | |
| 5 | Case Study 2: Employee attitude surveys – engagement and workforce perceptions  [What is employee engagement and does it matter? An evidence-based perspective](https://engageforsuccess.org/wp-content/uploads/2015/09/Rob-Briner.pdf)  **Fall Break # 1** | Ch. 5 | [Week 5 PPA](https://docs.google.com/document/d/1jgF1_6dUcbK0ticEkorSAFJWkZ43jvNp8nEpZfrMH28/edit?usp=sharing) | |
| 6 | Case Study 3: Predicting employee turnover  (Optional) Turnover Costing [Tutorial](https://www.youtube.com/watch?v=YJZeZWS8DCk), [Slides](https://docs.google.com/presentation/d/1E1A1ZeGWVopFMCZ0Zd7YV7mbXoAdk5fuDt5gsdvigt0/edit), and [Calculator](https://docs.google.com/spreadsheets/d/1gid6O17IUu1gnLa8yPyAngdI2F8RRTME_1HnPcwRfbM/edit?usp=sharing) | Ch. 6 | [Week 6 PPA](https://docs.google.com/document/d/1Ws-Ni9-udQiha5vJ67Yzy3UPlqT0-WLn4NZw65x6Egk/edit?usp=sharing) | |
| 7 | Case Study 4: Predicting employee performance  (Optional) [Absenteeism Costing Tutorial](https://www.youtube.com/watch?v=V4XiahmM7MU&feature=youtu.be), [Slides](https://docs.google.com/presentation/d/1jr_IK1DiovcV4-mS8-tfH1Mub61oaX_sJJNaMtLqC9M/edit), and [Calculator](https://docs.google.com/spreadsheets/d/1PM7wyJ7YylyR-aGuqLpZiK72xpd48yEDLiBt2rWdh1A/edit?usp=sharing) | Ch. 7 | [Week 7 PPA](https://docs.google.com/document/d/1QZDxDQwVl5TuSzRB0ZKcPOZuTlc4AAGOnqtAFWPCrQo/edit?usp=sharing) | |
| 8 | Case Study 5: Recruitment and selection analytics | Ch. 8 | Week 8 PPA | |
| 9 | Case Study 6: Monitoring the impact of interventions  **Fall Break # 2** | Ch. 9 | Week 9 PPA | |
| 10 | Business applications: Scenario modeling and business cases | Ch. 10 | Week 10 PPA | |
| 11 | More advanced HR analytic techniques   * Mediation * Multi-level modeling * Structural equation modeling * Growth modeling * Latent class analysis * Response surface methodology * Machine learning | Ch. 11 | Week 11 PPA | |
| 12 | Reflections on HR analytics: Usage, ethics, and limitations | Ch. 12 | Week 12 PPA | |
| 13 | **Final Project Prep – HR Analytics Challenge** | | | |
| 14 |
| 15 |
| 16 | **Final Presentation** |  | | Peer Evaluations Due |

**Course Requirements**:

Your course grade will be comprised of two elements, each of which is described in greater detail below:

*Note*: when submitting assignments, I prefer a Google Doc link that I can access. This allows us to have a virtual conversation about your submission. Also, please do not try to upload a link *and then* do the work. I can tell (Google Tracks this) and you will be penalized for a late submission.

**PARTICIPATION (10%):**

Measured each day we hold class using the following behavioral checklist:

* Was the student present in class and on time (considered equivalent to an excused absence)? Unexcused absences are not given any credit? Lateness is penalized.
* Either of the following: (i) Was the student prepared for class this day or (i) was the student contributing to class (enhancing another’s experience of the class in some form or fashion)? Students who either (i) do not do what was asked or (ii) are not actively participating (e.g., on cell phone during exercises or discussions) will not receive full credit.

Typically, points are awarded each class as follows:

0 – Absent without excuse

1 – Late to class and neither prepared nor contributing

2 – Showed up to class on time but not prepared or contributing

3 – Showed up to class on time and either prepared or contributing

**PARTICIPATION PREPARATION ASSIGNMENTS****(PPAs) (70%).**

This is a project-based course. Preparation for each week of class will be extensive. You must read at least one chapter, occasionally complete some outside reading, and always complete a corresponding participation preparation assignment that contains an online tutorial. The weekly PPAs will serve as your guide to the readings and involve a tutorial for using R to solve an HR analytics problem (e.g., predicting turnover using demographic, organizational, and psychological factors via multiple linear regression). The assignments can take several hours to complete and must be completed outside of class. All assignments can be found in the course schedule.

**TEAMWORK (20%)**

Analytics is a team sport. You need to work together each week to complete the work that I’ve assigned. Not only will this help you to cover the material efficiently, but it will also give you the opportunities to learn from one another as well as teach one another. Teaching others what the analytics mean is a crucial skill we are cultivating in this course and is facilitated by completing the weekly assignments (PPAs) as a team. Near the end of the course, I will assign an HR analytics challenge. This is a friendly student competition. I will give you a business context and dataset to analyze. You are then tasked with analyzing the dataset as you see fit, visualizing the results to communicate key insights, and making a recommendation to the business. The winning presentation is voted on by the students and that team is given a certificate.

**Presentation Expectations:** Poor writing habits will negatively impact this grade. Students must share a presentation that contains the following at a minimum (other expectations may be imposed later):

* Presentation is free of grammatical errors
* Key terms and concepts are clarified to the audience
* The merits and drawbacks of the analytical approach that was taken are addressed
* Visualization(s) of key insights are made that do some sense giving to the audience[[1]](#footnote-1).

*Note: Additionally, I* ***strongly advise*** *students to have their writing checked before submission. The writing center is a valuable resource that I highly recommend exploiting (I will offer 1 bonus point for using the writing center). To help you out, consider using free resources from* [*Grammarly*](https://www.grammarly.com/?q=brand&utm_source=google&utm_medium=cpc&utm_campaign=brand_f1&utm_content=76996511046&utm_term=grammarly&matchtype=e&placement=&network=g&gclid=EAIaIQobChMIp-uq4v7g3AIVBA1pCh1yOwiHEAAYASAAEgK0t_D_BwE) *(which checks for grammatical issues) and* [*Hemmingway*](http://www.hemingwayapp.com) *(which checks for readability).*

*Peer Evaluations***:** Peer evaluations will be collected from team members at the end of the semester and used to inform my judgment regarding the final grade you will be assigned regarding teamwork. Additionally,because the possibility of social loafing exists with team projects, groups have the right to **FIRE a team member** for not participating in the team assignments. If a team **decides to FIRE a member**, they must provide some proof (e.g., repeated email contacts) that the team member truly has not performed his/her part in the teamwork. At that time, the team member will receive a **ZERO** for any graded teamwork up to that point in the semester. From that time forward, this individual will be required to perform all future team assignments by his/herself. Failure to complete these future assignments will also result in a **ZERO**.

**Methods of Evaluation**:

1. Participation: 10%
2. Participation Preparation Assignments: 70%
3. Teamwork: 20%

Final grades will be determined on the following basis:[[2]](#footnote-2)

A = 90.00% or better (All major and minor goals achieved)

B = 80.00 – 89.99% (All major goals achieved; some minor ones not)

C = 70.00 – 79.99% (All major goals achieved; many minor ones not)

D = 60.00 – 69.99% (A few major goals achieved, but the student is not prepared for advanced work)

F = 59.99% or less (None of the major goals achieved)

*Note*: While I do not round up, I will change your grade manually if I see that you have developed a lot over our time together. This means consistently showing up to class consistently, participating actively in discussions, and showing evidence of growth in the course.

**Make-Up Procedure:** As there are no exams in this independent study, this segment is not applicable.

**College of Business Testing Policy:**

In an effort to maintain the highest standard of academic integrity, the College of Business has adopted a testing policy to which this class will adhere. It addresses behavior before, during and after testing.

This policy is posted on the College's website:

<https://www.nicholls.edu/business/wp-content/uploads/sites/20/2019/10/CBA-testing-policy-fall-18.pdf>

**Attendance / Punctuality Policy:** Please see the section above outlining expectations for the PPAs, which explains how student attendance and contribution to meetings is evaluated.

**DROP DATE**: The last day to drop a course with a **“W”** is:

**Academic Dishonesty Policy / Cheating / Disruptive Behavior**: *(use of cell phones, distracting behavior, sleeping, use of computers for purposes other than class related, etc.)*

Any student(s) caught violating the University Academic Dishonesty Policy (cheating, plagiarism, etc.) on ANY graded assignment will receive a grade of “0” on the assignment. Depending upon the severity of the infraction, this instructor reserves the right to assign a semester grade of “F” in the course. All issues of Academic Dishonesty will be reported to the Dean of the College of Business Administration and/or Dean of Student Life for further actions. Students should familiarize themselves with the terms of dishonesty, cheating/plagiarism, and disruptive behavior in the [Student Policy and Procedure Manual](https://www.nicholls.edu/student-policy/academic-integrity/definitions/).

**Cell Phone & Other Classroom Behavior Policy:**

I will ask that you keep your phones, tablets, and computers inaccessible unless necessary for class. I have two principles that govern decisions to use technology in the classroom: (1) electronic devices (e.g., computers, tablets, cell phones) can be used if doing so facilitates student and peer productivity; (2) any forms of counterproductive technology use (e.g., looking at Facebook during a group activity) will be punished by a loss of participation credit for that day. Students who are using technology in a way that distracts from others’ classroom experiences will be removed from class. Students who wonder whether or not they should use an electronic device should ask for my permission (though, they will find that I provide guidance on when to use technology).

**Multiple Cheating Offenses:**

The Academic Integrity Section of the Student Policy and Procedure Manual includes a requirement that faculty file a charge complaint statement with their respective dean whenever a student is confronted or disciplined for cheating. The Office of Academic Affairs will maintain these records, and any student confronted and/or disciplined for multiple offenses of academic dishonesty will be brought before the Academic Affairs Integrity Committee for further review and potential sanctions that may include dismissal from the University up to one academic year. Please read the Student Policy and Procedure Manual for further details regarding this policy.

**Academic Grievances:**

The proper procedure for filing grade appeals or grievances related to academic matters is listed in the Academic Integrity Section of the Student Policy and Procedure Manual at the following link: <https://www.nicholls.edu/student-policy/academic-integrity/>

# Chain of Command

**Nicholls is committed to providing the best class experience possible. If you have any concerns about this course outside of what your instructor or professor can address, please follow the chain of command that has been established as part of university protocol:**

1. Contact your professor or advisor, again, to find a potential solution.

**If your concern was not resolved, then:**

2. Contact your Department Head of Business Administration & Computer Information Systems

o Ms. Sherry Rodrigue

o Email: Sherry.Rodrigue@nicholls.edu

o Office 101 White

o Phone: 985-448-4749

**If your concern was still not resolved, then:**

3. Contact the Dean of the College of Business Administration:

o Dr. Marilyn Macik-Frey

o Email: marilyn.macik-frey@nicholls.edu

o Office: 106 White Hall

o Phone: 985-448-4171

**If your concern warrants further consideration by the university administration, the Dean will contact the appropriate person.**

**Classwork During Extreme Emergencies**

During extreme weather or other emergency situations, the President of the university may declare either **Closure Status** or **Remote Learning Status** for a period of one or more days. During these times, students and faculty are responsible for reading and remaining familiar with (1) official emergency notifications through the Nicholls website and (2) all emergency guidelines of the university.

**CLOSURE STATUS.** When the university is officially closed, all teaching operations are suspended. During these days, there will be neither classroom nor online teaching, no expectation of class participation, no assignments due, and no tests or quizzes administered.

**REMOTE LEARNING STATUS.** When the university is open but it is unsafe to travel to or work on campus, students and faculty are responsible for continued learning through remote (online) means. During these days, teaching will occur and class participation is expected. Assignments, tests, and quizzes will be administered as planned unless otherwise directed by the faculty instructor. Under this status, for learning to continue:

* Students must (1) maintain access to Moodle, Nicholls email, phone, and textbooks and other course materials and (2) remain in contact with their course instructors.
* Students are required to have access to the following to participate in remote learning: 1) A computer with broadband internet access. As courses may require the watching of video lessons and the completion of online lessons, an internet connection of 5mbps is a minimum requirement. 2) Access to a webcam and microphone. These will be needed for class discussions, as well as for taking exams. 3) The ability to download the following software which may differ for each faculty member but could be Zoom, ProctorU, Respondus, Skype, Discord, etc.

Faculty will (1) conduct teaching through online means, (2) ensure opportunities for student progress and completion, and (3) adjust course requirements as necessary to accommodate special courses like labs, studios, and clinical.

**Student Portfolio – Watermark Student Learning and Licensure (SLL)**

Nicholls State University has adopted Watermark’s Student Learning and Licensure (SLL) and Outcomes Assessment Projects (OAP) as its Assessment System. SLL allows you to set up a personal portfolio highlighting the skills you acquire in your time at Nicholls, including activities outside of the classroom. This class is using this system to assess the learning outcomes of your academic program or of the university. All students have assessed a fee called Electronic Assessment Fee in their first semester at Nicholls. SLL and OAP assignments will be loaded through Moodle. You will be sent an invitation from Watermark in the second week of the semester. Inquiries about any Watermark product can be sent to watermark@nicholls.edu.

**University Title IX Statement**

Students who believe they have been harassed, discriminated against, or involved in sexual violence should contact the University’s Title IX Coordinator (titleix@nicholls.edu) or visit<http://nicholls.edu/titleix>. This link does not work, for information about campus resources and confidential support services, including confidential counseling services.

**Americans With Disabilities Act**: If you have a documented disability that requires assistance, you will need to register with the Student Access Center for coordination of your academic accommodations. The Student Access Center is located in 158A Shaver Gym. The phone number is (985) 448-4430 or (TTY 449-0002). Additional information can be found at<https://www.nicholls.edu/student-access-center/>

**Assisting with Studying and Assignments:**

* **The Tutoring Center.** Call 985-448-4100, email: tutoring@nicholls.edu, or visit [https://www.nicholls.edu/tutoring/](https://www.nicholls.edu/academic-services-center/tutorial-and-academic-enhancement-center/).
* **The Writing Center.** Call 985-448-4100, email: writingcenter@nicholls.edu, or visit [https://www.nicholls.edu/tutoring/](https://www.nicholls.edu/academic-services-center/tutorial-and-academic-enhancement-center/).
* **Online Tutoring Resources through Moodle.** Locate the *University Services* menu and select "Tutoring [Services." Then scroll down to the](http://moodle2.nicholls.edu/moodle/) "Online Resources" section on the webpage.
* **Remote Online Tutoring/Skills Building.** On Moodle main page, under My Courses, choose “Tutoring for Students.” Select Brainfuse to access a comprehensive suite of online academic services designed to support many learning needs and styles. There is a $55 charge for two hours of live tutoring.

1. Sense giving amounts to helping the readers to make sense of a finding; it requires writing and or presenting ideas in a such a way that the preferred (ideally correct) interpretation is facilitated (Patriotta, 2017). In ways, this is the opposite of “letting the data speak”.

   Patriotta, G. (2017). Crafting papers for publication: Novelty and convention in academic writing: Crafting papers for publication. *Journal of Management Studies*, *54*(5), 747–759. <https://doi.org/10.1111/joms.12280> [↑](#footnote-ref-1)
2. Adapted from Travers (1950).

   Travers, R. (1950). *How to make achievement tests*. Odyssey Press. [↑](#footnote-ref-2)