

# CS5001 - Intro. to Deep Learning

## *Fall Semester 2018 Syllabus*

### **Lecture:**

<u>Section A:</u> Time: MWF 1:00pm - 1:50pm Room: CS - 207	
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### **Website:**

<http://web.mst.edu/~ricardom/cs5001/18.3>

### **Instructor:**

Dr. A. Ricardo Morales	Computer Science Building Rm 340 Phone: (573) 341-6353 Fax: (573) 341-4501 Email: <a href="mailto:ricardom@mst.edu">ricardom@mst.edu</a> URL: <a href="http://www.mst.edu/~ricardom">http://www.mst.edu/~ricardom</a>
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### **Office Hours:**

TBA

### **Course Objective and Topics:**

This course introduces reinforcement learning and artificial neural networks as the foundations for deep learning and covers deep learning architectures, including deep neural networks, convolutional deep neural networks, deep belief networks and recurrent neural networks. Students will implement course concepts in intensive programming assignments.

### **Prerequisites:**

A Grade of "C" or better in both COMP SCI 2500 and MATH 3108.

## Textbook:

David L. Poole and Alan K. Mackworth,  
"Artificial Intelligence: Foundations of Computational Agents", 2nd Edition.  
Available FREE here [\[link\]](#)

## Experimental Course:

**This is an experimental course, and as such, the course material is continuously under development, and the course structure should be considered "under construction".**



## Evaluation Criteria:

There will be multiple programming assignments, 3 tests, and a final exam.

Tests / Exam:	50%
Homework:	50%

## Grading Scale:

A : [90 - 100]%  
B : [80 - 90)%  
C : [70 - 80)%  
D : [60 - 70)%  
F : < 60%

## Programming Assignments:

There will be multiple programming assignments.

Late submissions of homeworks will be penalized:

- 10% penalty after the first 24 hours (1st day).

- 25% penalty after the next 24 hours (2nd day).
- 50% penalty after the next 24 hours (3rd day).
- No credit thereafter.

**Makeups:**

No makeup homework / tests will be given unless the student contacts the instructor before the exam and has an MS&T-acceptable documented reason (i.e. illness, death in the family, etc).

I will do my best to address any concerns you have about the class. Please feel free to approach me.

My immediate supervisor is Prof. Clayton Price. If there are any problems that I am unable to resolve for you relevant to this class, address your concerns to Prof. Price. His office is CS-325 and his e-mail is [price@mst.edu](mailto:price@mst.edu).

**S&T Early Alert System:**

All faculty are encouraged to utilize the online Early Alert System. The purpose of the Early Alert System is to improve the overall academic success of students by improving communication among students, instructors and advisors; reducing the time required for students to be informed of their academic status; and informing students of actions necessary by them in order to meet the academic requirements in their courses.

**Academic Dishonesty:**

<http://registrar.mst.edu/academicregs/index.html>

Page 30 of the Student Academic Regulations handbook describes the student standard of conduct

relative to the System's Collected Rules and Regulations section 200.010, and offers descriptions of academic dishonesty including cheating, plagiarism or sabotage. Additional guidance for faculty, including the University's Academic Dishonesty Procedures, is available online at <http://ugs.mst.edu>.

## **Classroom Egress Maps:**

<http://designconstruction.mst.edu/floorplan/>

Please familiarize yourselves with the classroom egress maps.

## **Disability Support Services:**

<http://dss.mst.edu>

Any student inquiring about academic accommodations because of a disability should be referred to Disability Support Services so that appropriate and reasonable accommodative services can be determined and recommended. Disability Support Services is located in 204 Norwood Hall. Their phone number is 341-4211 and their email is dss@mst.edu. Instructors may consider including the following statement on their course syllabus as a means of informing students about the services offered:

*"If you have a documented disability and anticipate needing accommodations in this course, you are strongly encouraged to meet with me early in the semester. You will need to request that the Disability Services staff send a letter to me verifying your disability and specifying the accommodation you will need before I can arrange your accommodation."*

If you have any questions about the information listed above, please contact the Office of Undergraduate Studies at 573-341-7276.

## **Title IX:**

Missouri University of Science and Technology is committed to the safety and well-being of all members of its community. US Federal Law Title IX states that no member of the university community shall, on the basis of sex, be excluded from participation in, or be denied benefits of, or be subjected to discrimination under any education program or activity. Furthermore, in accordance with Title IX guidelines from the US Office of Civil Rights, Missouri S&T requires that all faculty and staff members report, to the Missouri S&T Title IX Coordinator, any notice of sexual harassment, abuse, and/or violence (including personal relational abuse, relational/domestic violence, and stalking) disclosed through

communication including but not limited to direct conversation, email, social media, classroom papers and homework exercises.

Missouri S&T's Title IX Coordinator is Vice Chancellor Shenethia Manuel. Contact her directly (manuels@mst.edu; (573) 341-4920; 113 Centennial Hall) to report Title IX violations. To learn more about Title IX resources and reporting options (confidential and non-confidential) available to Missouri S&T students, staff, and faculty, please visit <http://titleix.mst.edu>.