# Texas A&M University Commerce MS Physics with Teacher Certification – Fall 2021

Welcome to the Department of Physics & Astronomy. Here is some information that you might find helpful about the MS Physics with Teacher Certification (MPTC) program and what & how to register for classes.

# PREREQUISITE COURSES

Students are expected to have completed PHYS 2425 University Physics 1, PHYS 2426 University Physics 2, MATH 2413 Calculus 1, and MATH 2414 Calculus 2 or equivalent before beginning their courses in our program.

#### HOW TO TELL IF YOU ARE REQUIRED TO TAKE THE PREREQUISITE COURSES:

- If you have a bachelor's degree in a STEM field, you most likely do not need to take these courses.
- You are expected to have some familiarity with mechanics and electricity and magnetism. If a student feels as if they are deficient in either area, they will be free to take one or both physics courses. However, you will most likely have to take them at a local community college, as they are not typically offered online.
- You are expected to have some familiarity with calculus. PHYS 530 Physics Math Methods for Educators includes a calculus review. If a student feels they need additional calculus review, they will be free to take one or both calculus courses. However, you will most likely have to take them at a local community college, as they are not typically offered online.

# **CORE PHYSICS COURSES**

You need to complete 5 out of 6 core physics courses:

COURSE #	COURSE NAME	CREDITS
<b>PHYS 530</b>	Physics Math Methods for Educators	3
<b>PHYS 531</b>	Classical Mechanics for Educators	3
<b>PHYS 532</b>	Electricity and Magnetism for	3
	Educators	

<b>PHYS 561</b>	Astronomy and Astrophysics for Educators	3
<b>PHYS 535</b>	Thermodynamics for Educators	3
<b>PHYS 526</b>	Quantum Universe for Educators	3

# TEACHER CERTIFICATION COURSES

You are required to complete 18 hours of teacher certification courses.

COURSE #	COURSE NAME	<b>CREDITS</b>
<b>EDCI 514</b>	Management and Curriculum	3
	Development for Diverse Learners	
<b>ETEC 524</b>	Introduction to Educational	3
	Technology	
<b>EDCI 519</b>	Response to Intervention	3
<b>RDG 516</b>	Foundations of Reading	3
<b>EDCI 517</b>	Reading and Learning	3
<b>EDCI 515</b>	Evidence-Based Teaching	3

# RESEARCH LITERATURE

There is a required capstone course PHYS 595 Research Literature. In this course, you will write a literature review on a topic in physics of your choosing.

Components	Description	Credits
Core Physics	5 core courses	15
Courses		
Teacher	6 certification courses	18
Certification		
Courses		
<i>PHYS 595</i>	Research literature class	3
Total		36

# TEACHER CERTIFICATION REQUIREMENTS

During your first year in the program, you must

- Take and pass the PACT content exam in either 7-12 physics or 7-12 science. Learn about your exam and register at: <a href="http://www.tx.nesinc.com/PageView.aspx?f=GEN\_Steps.html">http://www.tx.nesinc.com/PageView.aspx?f=GEN\_Steps.html</a>

- Apply to the alternative certification program. Submit your application through: <a href="https://teachcert.tamuc.edu/teacher/ACP/ACApplication.asp?\_ga=2.57306863.43074030">https://teachcert.tamuc.edu/teacher/ACP/ACApplication.asp?\_ga=2.57306863.43074030</a> 7.1606751524-6442569.1583256661

Prior to beginning your student teaching internship, you must

- Complete 4 of the teacher certification courses.
- Complete 30 hours of classroom observation.

You must complete a student teaching internship in one of two ways:

- Apply for a 16 week unpaid internship through your Certification Coordinator, Tracey Stedman. (Recommended degree plans are set up for this option.)
- Find a 1 year paid internship with a school district directly.

Before completing your internship, you must

- Pass the Pedagogy and Professional Responsibilities (PPR) exam.

If you have any questions about teacher certification requirements, contact the Certification Coordinator, Tracey Stedman (Tracey.Stedman@tamuc.edu).

## **COMPREHENSIVE EXAM**

#### WRITTEN COMPREHENSIVE EXAM:

- Comprehensive exam tests the six core physics courses.
- The Comprehensive Exam should be taken as soon as you have completed the core courses or in your last semester.
- You have two chances to take the comprehensive exam.
- Additional chance might be given through a petition (not guaranteed).

## WHICH CLASSES TO REGISTER FOR

#### (FALL START) A TYPICAL SCHEDULE IF TAKING COURSES ONLY IN FALL AND SPRING:

	Fall	Spring
Year 1	<ul> <li>PHYS 530 Physics Math</li> </ul>	PHYS 532 Electricity and
	Methods for Educators	Magnetism for Educators
	<ul> <li>PHYS 531 Classical</li> </ul>	<ul> <li>PHYS 526 Quantum Universe for</li> </ul>

	Mechanics for Educators	Educators OR PHYS 535
	<ul> <li>EDCI 514 Management and</li> </ul>	Thermodynamics for Educators
	Curriculum Development for	<ul> <li>ETEC 524 Introduction to</li> </ul>
	Diverse Learners	Educational Technology
Year 2	<ul> <li>PHYS 561 Astronomy and</li> </ul>	<ul> <li>EDCI 517 Reading and Learning</li> </ul>
	Astrophysics for Educators	<ul> <li>PHYS 595 Research Literature</li> </ul>
	<ul> <li>EDCI 519 Response to</li> </ul>	<ul> <li>EDCI 515 Evidence-Based</li> </ul>
	Intervention	Teaching
	<ul> <li>RDG 516 Foundations of</li> </ul>	-
	Reading	

# (SUMMER START) A TYPICAL SCHEDULE IF TAKING COURSES IN SUMMER, FALL AND SPRING:

	Summer	Fall	Spring
Year 1	<ul> <li>PHYS 530         Physics Math Methods for Educators         EDCI 519         Response to Intervention     </li> </ul>	<ul> <li>PHYS 531         Classical         Mechanics for         Educators</li> <li>EDCI 514         Management         and         Curriculum         Development         for Diverse         Learners</li> </ul>	PHYS 532     Electricity     and     Magnetism     for Educators     EDCI 517     Reading and     Learning
Year 2	PHYS 526     Quantum     Universe for     Educators OR     PHYS 535     Thermodyna     mics for     Educators      ETEC 524     Introduction     to Educational     Technology	<ul> <li>PHYS 561         Astronomy and         Astrophysics for Educators         RDG 516         Foundations of Reading     </li> </ul>	PHYS 595     Research     Literature     EDCI 515     Evidence-     Based     Teaching

## THINGS TO REMEMBER:

- Please consult with your academic advisor (<a href="mailto:robynne.lock@tamuc.edu">robynne.lock@tamuc.edu</a>) or certification coordinator (<a href="mailto:tracey.stedman@tamuc.edu">tracey.stedman@tamuc.edu</a>) if you need help picking from the classes, but please do that as soon as possible.
- Please consult the certification coordinator (<u>tracey.stedman@tamuc.edu</u>) if you need help with teacher certification requirements.

## HOW TO REGISTER FOR CLASSES

Use the following link to access the graduate-level courses for your program in the schedule of classes. There you will have access to textbooks required, instructor c/v, and syllabi information: <a href="https://appsprod.tamuc.edu/Schedule/Schedule.aspx">https://appsprod.tamuc.edu/Schedule/Schedule.aspx</a>. Graduate course numbers are 500-level and above. Below are the instructions for Accepting the Financial Agreement and Registering for courses:

#### Registration

To register in classes, go to the 'Student Resources' tab



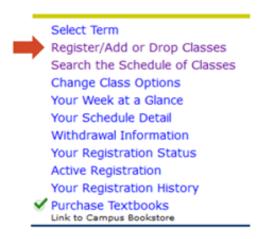
Next, select 'Registration Menu'

#### Student Information · Registration Menu . Search Class Schedule · Student Records Menu Final Grades · View Curriculum Information View Holds Academic Transcript (Advising/Unofficial Only) · Order Official Transcript 1098-T · Undergrad DegreeWorks Grad School DegreeWorks • View Status of Transcript Requests (TranscriptsPlus Self Service Portal) View TSI Info · View Guaranteed Tuition Plan Info Course Catalog · Purchase Textbooks Online

Select 'Register/Add or Drop Classes'

· Verify Meningitis Shot Requirement

# Registration



Select a term and then submit:

# Registration Term

Select a Term:	Fall 2020	~	<del>-</del>
Submit			
RELEASE: 8.7.	1		

Next, enter the CRN (course registration number – five-digit number) in the boxes below and then submit changes:

#### Add Classes Worksheet



Select Class Search to look for classes if you don't know the CRN or go to page 21 to learn how to find the CRN.

Check with your advisor before registration if you're unsure what to take.

## **Financial Responsibility Agreement**

This agreement must be accepted each time registration opens. You will be prompted to accept the agreement upon attempting registration.

After reviewing your Financial Responsibility Agreement, check the box at the bottom of the agreement and select 'Continue' to proceed with registration.



## HOW TO ACCESS DEGREEWORKS

Below are the instructions for accessing the DegreeWorks screen in myLeo:

# **DegreeWorks**

DegreeWorks is where your degree plan is managed. It will display:

- · Degree requirements
- Courses you've taken and final grades (R=registered so there isn't a grade yet)
- GPA
- Advisor
- Earned hours
- Academic standing, etc.

#### Select the 'Student Resources' tab:



Select 'Grad School DegreeWorks' from the Student Information Menu:

### Student Information

- · Registration Menu
- · Search Class Schedule
- · Student Records Menu
- Final Grades
- View Curriculum Information
- View Holds
- · Academic Transcript (Advising/Unofficial Only)
- · Order Official Transcript
- 1098-T
- Undergrad DegreeWorks
- Grad School DegreeWorks
- View Status of Transcript Requests (TranscriptsPlus Self Service Portal)
- View TSI Info
- · View Guaranteed Tuition Plan Info
- Course Catalog
- · Purchase Textbooks Online
- Verify Meningitis Shot Requirement

IMPORTANT: Contact your advisor if any classes are displayed under the Non-Program Electives section. Courses in this section do not count and are ineligible for financial aid.

You can locate your <u>faculty (academic) advisor</u> in DegreeWorks. Under Student View there is a heading called 'Advisors'. There you will see two names:

- Louis Lufkin (is the graduate enrollment specialist for the CS program)
- The second name will be the physics faculty who is your <u>Academic Advisor</u> for the MS Physics with Teacher Certification program

#### WHO TO CONTACT?

Depending on your question, you need to contact the following:

Academic Advisor (robynne.lock@tamuc.edu):

- Degree plan and course advising

- Physics related questions

# $\textbf{Graduate Office } (\underline{Graduate.School@tamuc.edu}) :$

- Thesis guidelines, deadlines and templates.