

# Live Embryo Image Analysis

PHYS 4391, Section 020 | CRN 23366  
Research Annex

## Contact Information

**Dr. Michael C. Holcomb**

michael.holcomb@angelo.edu

325-486-6787

VIN 123

**Office Hours**

MWF 11:00am–12:15pm

TR 09:00am–10:45am

*Also available by appointment*

## Course Overview

This course will be a directed research project intended to provide the student with a meaningful and productive physics research experience. Subject matter will vary depending on student interest; however, will generally lie within the interdisciplinary field of theoretical and computational biophysics.

This course is intended to familiarize the student with skills, strategies, and techniques that will help prepare them for future professional or graduate level research. To this end, the course will emphasize a mix of literature review, collaborative meetings, and computational modeling.

### Expected Learning Outcomes

The expected learning outcomes for the course, listed below, will be assessed through a combination of shorter-term, tangible goal setting and overall performance on the selected research project. The student will also be asked multiple times throughout the semester to prepare and present literature summaries or research updates in oral presentation, poster, or journal article manuscript form.

1. Demonstrate the ability to find, summarize, and analyze peer-reviewed publications.
2. Learn how to interact productively in a collaborative research environment.
3. Gain a general understanding of computational modeling practices.

## GRADING POLICIES

Your letter grade will be determined on the following qualitative scale on the basis of the research advisor's judgement:

- **A** Excellent; met or exceeded all expectations with no substantive shortcomings
- **B** Good; most or all expectations were met with only minor shortcomings
- **C** Satisfactory; most expectations were met but with at least one significant shortcoming
- **D** Unsatisfactory; some expectations met but with multiple significant shortcomings
- **F** Failing; most or all expectations not met with multiple significant shortcomings

### Incomplete Grade Policy

It is policy that incomplete grades be reserved for student illness or personal misfortune. Please contact faculty if you have a serious illness or personal misfortune that would keep you from completing course work.

Documentation may be required. [See ASU Operating Policy 10.11 Grading Procedures for more information.](#)

## INCLUSIVE LEARNING ENVIRONMENT (Adapted from Yale Center for Teaching and Learning)

### Civility and Respect

Our university supports and wants to foster a civil, respectful, and open-minded climate so that all of us can live and work in an environment free of harassment, bias-motivated behaviors, unfair treatment, and fear. The university expects all members of our community to refrain from actions or behaviors that intimidate, humiliate, or demean persons or groups or that undermine their security or self-esteem based on traits related to race, ethnicity, country of origin, religion, gender identity/expression, sexual orientation, age, or physical or mental ability, including learning and/or developmental disabilities and past/present history of mental disorder or other category protected by state or federal law.

### Accommodations for Students with Disabilities

Angelo State University is committed to the principle that no qualified individual with a disability shall, on the basis of disability, be excluded from participation in or be denied the benefits of the services, programs or activities of the university, or be subjected to discrimination by the university, as provided by the Americans with Disabilities Act of 1990 (ADA), the Americans with Disabilities Act Amendments of 2008 (ADAAA) and subsequent legislation.

Student Disability Services is located in the Office of Student Affairs, and is the designated campus department charged with the responsibility of reviewing and authorizing requests for reasonable accommodations based on a disability. It is the student's responsibility to initiate such a request by contacting an employee of the Office of Student Affairs, in the Houston Harte University Center, Room 112, or contacting the department via email at [ADA@angelo.edu](mailto:ADA@angelo.edu). For more information about the application process and requirements, visit the [Student Disability Services website](#). The employee charged with the responsibility of reviewing and authorizing accommodation requests is:

#### Point of Contact

Dallas A. Swafford  
Director of Student Disability Services  
Email: [dallas.swafford@angelo.edu](mailto:dallas.swafford@angelo.edu)

#### Office

Houston Harte University Center, Room 112  
Office Email: [ada@angelo.edu](mailto:ada@angelo.edu)  
Office Phone: 325.942.2047

### Title IX at Angelo State University

Angelo State University is committed to providing and strengthening an educational, working, and living environment where students, faculty, staff, and visitors are free from sex discrimination of any kind. In accordance with Title VII, Title IX, the Violence Against Women Act (VAWA), the Campus Sexual Violence Elimination Act (SaVE), and other federal and state laws, the University prohibits discrimination based on sex, which includes pregnancy, and other types of Sexual Misconduct. Sexual Misconduct is a broad term encompassing all forms of gender-based harassment or discrimination and unwelcome behavior of a sexual nature. The term includes sexual harassment, nonconsensual sexual contact, nonconsensual sexual intercourse, sexual assault, sexual exploitation, stalking, public indecency, interpersonal violence (domestic violence or dating violence), sexual violence, and any other misconduct based on sex.

Students are encouraged to report any incidents of sexual misconduct directly to ASU's Office of Title IX Compliance and the Director of Title IX Compliance/Title IX Coordinator at:

#### Point of Contact

Michelle Boone, J.D.  
Director of Title IX Compliance &  
Title IX Coordinator  
Email: [michelle.boone@angelo.edu](mailto:michelle.boone@angelo.edu)

#### Office

Mayer Administration Building, Room 210  
Office Phone: 325.942.2022  
Report an incident: [www.angelo.edu/incident-form](http://www.angelo.edu/incident-form)

**Note from Dr. Holcomb:** As a faculty member at Angelo State, I am a mandatory reporter and am obligated to report incidents involving sexual misconduct to the Title IX Coordinator. Should you wish to speak to someone in confidence about an issue, you may contact the University Counseling Center (325.942.2371), the 24-Hour Crisis Helpline (325.486.6345), or the University Health Clinic (325.942.2171).

### Student Absence for Observance of Religious Holy Days

A student who intends to observe a religious holy day should make that intention known in writing to the instructor prior to the absence. See [ASU Operating Policy 10.19 Student Absence for Observance of Religious Holy Day](#) for more information.

## ACADEMIC INTEGRITY

Students are expected to maintain complete honesty and integrity in all work. Any student found guilty of any form of dishonesty in academic work is subject of disciplinary action and possible expulsion from ASU.

The College of Science and Engineering adheres to the Statement of [Academic Integrity](#).

### Plagiarism

Plagiarism is a serious topic covered in ASU's [Academic Integrity policy](#) in the Student Handbook. Plagiarism is the action or practice of taking someone else's work, idea, etc., and passing it off as one's own. Plagiarism is literary theft.

In your discussions and/or your papers, it is unacceptable to copy word-for-word without quotation marks and the source of the quotation. It is expected that you will summarize or paraphrase ideas giving appropriate credit to the source both in the body of your paper and the reference list.

Papers are subject to be evaluated for originality. Resources to help you understand this policy better are available at the [ASU Writing Center](#).

### Copyright Policy

Students officially enrolled in this course should make only one printed copy of the given articles and/or chapters. You are expressly prohibited from distributing or reproducing any portion of course readings in printed or electronic form without written permission from the copyright holders or publishers.