

## M.S. in Clinical Translational Sciences

### Sample Curriculum for Phoenix Students:

#### Required Courses \*

- Principles:
  - Cellular, Molecular and Neural Biology (CTS 555) – 6 units [*for post-baccalaureate students*]; OR
  - Principles of Clinical Research I and II (CTS 501 and CTS 502, 4 units each); OR
  - Principles of Surgery or Principles of Medicine (CTS 610 or CTS 620A/B/C) – 3-6 units [*for postgraduate students*]
- Professional Development Series - minimum 4 units, including:
  - Responsible Conduct of Research (CTS 595C) – 1 unit/semester; taken Fall and Spring semesters [required]And an additional 2 units chosen from:
  - Individualized Scientific Writing (CTS 585) – 2 units
  - InnoVention and Entrepreneurship in Medicine (CTS 590A) – 1 unit
  - Professional & Career Training Series (CTS 595D) – 2 units
  - Or similar courses in other departments.
- Biostatistics:
  - Biostatistics in Public Health (BIOS 576A) – 3 units [offered online in Spring semester].
- Seminar and/or journal club/colloquium – 2 units total (1 unit per enrollment; 6 total enrollments).
  - The CTS seminar course in Phoenix is Biomedical Sciences Seminar (CTS 696B). *Postgraduate students may earn credit in CTS 696A, Medical Sciences Seminar, for attendance at relevant grand rounds series in a clinical department.\*\**
  - The CTS journal club/colloquium course available to Phoenix students is Biomedical Sciences Journal Colloquium (CTS 595) – different topics by section. *Postgraduate students may earn credit in CTS 595 for participation in clinical case conferences or a residency/fellowship program's journal club.\*\**
  - Seminar or journal club/colloquium courses offered via online instruction by Tucson campus graduate programs.
- Thesis (CTS 910) – 6 units

\* May substitute other courses with CTS approval with the exception of CTS 910.

\*\* Seminar or journal club credit for activities other than CTS courses toward Ph.D. requires prior approval from CTS.

#### Elective Options

Students may use any graduate courses approved by their faculty mentor as electives to meet the remaining M.S. unit requirements, including courses taught by Tucson faculty via online instruction.

#### Sample elective courses:

- Human Systems Neuroscience (CTS 556) – 3 units [offered Spring semester]
- Functional Human Histology (CMM 525A) – 4 units [offered online in Fall semester]
- Basic Principles of Epidemiology (EPID 573A) – 3 units [offered online in Fall and Spring semester]
- Inflammation and Immune Pathology (CMM 550) – 1 unit [offered online in Spring semester]
- Immunology Basics (CMM 537) – 1 unit [offered online in Spring semester]
- Fundamentals of Cardiovascular Hematology (MEDP 620) – 6 units [offered Spring semester]
- Neuropharmacology (PHCL 553) – 3 units [offered Spring semester with video link to Phoenix campus]
- Or any other available graduate courses recommended by the faculty mentor.