



**TMU Graduation Requirements**

- Complete a minimum of 122 semester units of credit.
- Complete a minimum of 40 semester units in upper division courses. Includes 300 & 400 level courses.
- Satisfy all General Education requirements.
- Complete the required curriculum for the chosen major's field(s) of study.
- Maintain a minimum GPA of 2.00 (cumulative) in all TMU Courses. *Some majors have different GPA requirements.*
- Complete a minimum of 32 semester units at TMU, not including Directed Studies coursework.
- A maximum of 12 units can be transferred to complete degree requirements after the last 12 units taken at TMU.

**GENERAL EDUCATION**

**SCRIPTURE SET** *Transfer students: Students who transfer with 24 or more units are required to take 1 Bible Gen Ed. per semester of enrollment at TMU.*

Units	Term	All other students must complete all Bible Gen Ed.	Units	Term	
3		B121 Essentials of Christian Thought	3		B202 New Testament Survey II
3		B101 Old Testament Survey I	3		BTH321 Christian Theology I
3		B102 Old Testament Survey II*	3		BTH322 Christian Theology II
3		B201 New Testament Survey I*	21 Total		*Or Non-Biblical Studies: IBEX300 with approval

**WORLDVIEW\* AND SKILLS\*\* SET** *Depending on the student's major, certain G.E. requirements allow for substitutions.*

Units	Term		
3		C100 Spoken Communication**	Or <u>Biblical Studies</u> : BMN310 Message Prep for Women, or BMN370 Sermon Prep & Delivery. <u>Business Administration</u> & <u>Marketing Media</u> : MGT330 Business Communication. <u>BM Music</u> : waived.
3		E110 English Composition**	Or 700+ score (Evidence-Based Reading & Writing section of SAT I), 3+ score (AP Language & Composition exam), 3+ score (AP Literature & Composition exam), 31+ score (English section of the ACT), 10+ score (WritePlacer exam from CollegeBoard), or 5+ score (Criterion Online Writing Evaluation Service from ETS).
3		E__ General Literature Elective*	Does not include: E322, E332 & E353. <u>BM Music</u> : waived.
3		Essentials of Literature*	E211 English Literature I, E212 English Literature II, E221 World Literature I, E222 World Literature II, E231 American Literature I, or E232 American Literature II.
3		ECN200 Essentials of Economics & Society	n/a
3		GS150 Essentials of Geology* or LS150 Essentials of Biology*	Or <u>Biological Science</u> : LS151 Organismic Biology. <u>Kinesiology</u> : LS321 Anatomy & LS322 Physiology.
1		GS150 Essentials of Geology Lab** or LS150 Essentials of Biology Lab **	Or <u>Biological Science</u> : LS151 Organismic Biology Lab. <u>Kinesiology</u> : LS321 Anatomy Lab & LS322 Physiology Lab.
3		H211 Essentials of World History I*	Or Pass World History Competency Exam & 3 units of Upper Division History. <u>BM Music</u> : H211 or H212. Students pursuing Single Subject Teaching Credential required to take both.
3		H212 Essentials of World History II*	
3		H230 Essentials of U.S. History*	n/a
3		MA240 Critical Thinking & Quantitative Analysis**	Or <u>Business Administration</u> & <u>Marketing Media</u> : BUS310 Statistics for Business. <u>Computer Science</u> : waived. <u>Liberal Studies/Teacher Ed.</u> : MA201, MA202 Math for Elementary School Teachers. <u>ALL</u> : MA101 Algebra & Trigonometry, MA121 Calculus or MA260 Statistics.
3		MU190 Essentials of Music & Art*	Or <u>Biblical Studies</u> : MU333/BMN333 Worship & Songs of the Church. <u>Music</u> : MU295 Music & Art for Musicians. <u>ALL</u> : ART338 Art History of the Western World.
3		P311 Essentials of Philosophy*	Or <u>English Ed.</u> , <u>History Ed.</u> , <u>Liberal Studies/Teacher Ed.</u> , <u>Music Ed.</u> , <u>Mathematics Ed.</u> , <u>Life Sciences Ed.</u> : P321 History and Philosophies of Education. <u>Music Production</u> : BCW367 Ethics. <u>Business Administration</u> & <u>Marketing Media</u> : BUS330 Ethics. <u>Biblical Studies</u> : BCW363 Apologetics.
3		POL220 U.S. Government**	Waived for non-U.S. citizens and non-resident aliens.
40	Total	(37 for Computer Science majors, 28 for BM Music majors.)	

**MAJOR: BIOLOGY CORE COURSES**

Units	Term	
4		CH151 General Chemistry I*
4		CH152 General Chemistry II*
4		CH351 Organic Chemistry I*
4		LS151 Organismic Biology*
1		LS220 Research Methods
4		LS252 Cell Biology*
4		LS342 Genetics and Genomics*
3		LS372 Origins

Units	Term	
1		LS420 Seminar in Biology
1		LS422 Senior Capstone
3		MA260 Elementary Statistics
4		PS251 General Physics I*,**
4		PS252 General Physics II*,***
41	Total	*With corresponding lab. **Optional substitute: PS211 College Physics I ***Optional substitute: PS212 College Physics II

**EMPHASIS: ANIMAL SCIENCE/PRE-VETERINARY**

Units	Term	
4		CH352 Organic Chemistry II*
4		LS241 Ecology and Environmental Science*
4		LS312 Animal Physiology*

Three of the following:

4		CH461 Biochemistry*
4		LS302 Comparative Anatomy*
4		LS318 Conservation Biology & Sustainability*
4		LS331 Developmental Biology*
4		LS341 Ecology*
4		LS346 Marine Biology*
3-4		LS348 Bio. Field Studies**
4		LS355 Parasitology*
4		LS361 Immunology*
4		LS362 Medical Microbiology*
4		LS375 Vertebrate Paleontology*
4		LS388 Mathematical Ecology*
4		LS398 Plant Science*
1-4		LS428 Research in Biology
3		MA121 Calculus I

64 Total (including Core courses).

\*With corresponding lab.

\*\*Can be repeated for credit.

**EMPHASIS: CELLULAR & MOLECULAR BIOLOGY**

Units	Term	
4		CH352 Organic Chemistry II*
4		CH461 Biochemistry*
4		LS351 Molecular Genetics*

Three of the following:

4		LS331 Developmental Biology*
4		LS355 Parasitology*
4		LS361 Immunology*
4		LS362 Medical Microbiology*
4		LS388 Mathematical Ecology*
4		LS398 Plant Science*
1-4		LS428 Research in Biology
3		MA121 Calculus I

64 Total (including Core courses).

\*With corresponding lab.

**EMPHASIS: GENERAL BIOLOGY**

Units	Term	
4		LS241 Ecology and Environmental Science*
19		Upper Division electives: Bio, Chem or Geo

64 Total (including Core courses).

\*With corresponding lab.

**EMPHASIS: NATURAL HISTORY/  
ENVIRONMENTAL BIOLOGY**

Units	Term	
4		GS452 Environmental Geoscience*
4		LS241 Ecology and Environmental Science*
4		LS318 Conservation Biology & Sustainability*

Three of the following:

4		CH352 Organic Chemistry II*
4		GS151 Historical Geology*
4		GS251 Mineralogy*
4		LS302 Comparative Geoscience*
4		LS312 Animal Physiology*
4		LS341 Ecology*
4		LS346 Marine Biology*
4		LS348 Bio. Field Studies**
4		LS355 Parasitology*
4		LS362 Medical Microbiology*
4		LS375 Vertebrate Paleontology*
4		LS388 Mathematical Ecology*
1-4		LS428 Research in Biology

64 Total (including Core courses).

\*With corresponding lab.

\*\*Can be repeated for credit.

**MAJOR: BIOLOGY CORE COURSES**

Units	Term	
4		CH151 General Chemistry I*
4		CH152 General Chemistry II*
4		CH351 Organic Chemistry I*
4		LS151 Organismic Biology*
1		LS220 Research Methods
4		LS252 Cell Biology*
4		LS342 Genetics and Genomics*
3		LS372 Origins

Units	Term	
1		LS420 Seminar in Biology
1		LS422 Senior Capstone
3		MA260 Elementary Statistics
4		PS251 General Physics I*, **
4		PS252 General Physics II*, ***
41	Total	*With corresponding lab. **Optional substitute: PS211 College Physics I ***Optional substitute: PS212 College Physics II

**EMPHASIS: PALEONTOLOGY**

Units	Term	
4		GS150 Essentials of Geology*, **
4		LS241 Ecology and Environmental Science*
4		LS375 Vertebrate Paleontology*

Three of the following:

4		CH352 Organic Chemistry II*
4		GS151 Historical Geology*
4		GS472 Sedimentology & Stratigraphy*
4		LS302 Comparative Anatomy*
3		LS307 Biology of Dinosaurs
4		LS341 Ecology*
3		LS346 Marine Biology
4		LS398 Plant Science*
1-4		LS428 Research in Biology
3		MA121 Calculus I

64 Total (including Core courses).

\*With corresponding lab.

\*\*Fulfills G.E. requirement

**EMPHASIS: PRE-NURSING**

Units	Term	
4		LS321 Human Anatomy*
4		LS322 Human Physiology*
4		LS362 Medical Microbiology*

Three of the following:

4		CH352 Organic Chemistry II*
4		CH461 Biochemistry II*
3		LS231 Human Growth & Development <i>Or</i> BE231 Human Growth and Development
4		LS331 Developmental Biology*
4		LS352 Medical Physiology*
4		LS361 Immunology*
1-4		LS428 Research in Biology
3		MA121 Calculus I

64 Total (including Core courses).

\*With corresponding lab.

**EMPHASIS: PRE-ALLIED HEALTH**

**EMPHASIS: PRE-DENTISTRY**

**EMPHASIS: PRE-MEDICINE**

Units	Term	
4		CH352 Organic Chemistry II*
4		CH461 Biochemistry*
4		LS241 Ecology and Environmental Science*

Three of the following:

4		LS321 Human Anatomy*
4		LS322 Human Physiology*
4		LS331 Developmental Biology*
4		LS341 Ecology*
4		LS351 Molecular Genetics*
4		LS352 Medical Physiology*
4		LS355 Parasitology*
4		LS361 Immunology
4		LS362 Medical Microbiology*
4		LS398 Plant Science*
1-4		LS428 Research in Biology
3		MA121 Calculus I

64 Total (including Core courses).

\*With corresponding lab.

**EMPHASIS: TEACHER EDUCATION IN LIFE SCIENCES**

Units	Term	
3		ED400 Foundations of Education* (Or ED101, ED202, and ED301)
3		P321 History & Philosophies of Education*, **
14		Upper Division electives: Bio, Chem or Geo

One of the following

3		ED202 Curriculum Instruction & Learning Theory*
14		ED301 Cultural & Linguistic Diversity in Teaching*

\*Teaching Credential pre-req., requires B- or better.

\*\*Fulfills G.E. requirement