I. Program of Study

The Graduate Medical Education Sciences (GMES) program offers a Master of Science (MS) degree. The GMES MS is a non-thesis degree designed to prepare students to be self-directed, life-long learners for medical or dental school or for teaching positions that emphasize anatomy, histology, biochemistry, cell biology, immunology and pathophysiology. Students complete the first three blocks of the School of Medicine curriculum (including Graduate Human Anatomy, Histology & Embryology, Introduction to Biochemistry, Cell Biology, Inflammation & Infection, and Introduction to Immunology, Hematology, and the Cardiovascular System) during the first year and then function as teaching assistants in these blocks during the second year. The Program Director will serve as the student’s advisor during year one, and after an education project is selected a faculty mentor will serve as the student's advisor until graduation. An education project and participation in at least one Interprofessional Activity must be completed by the end of the second year in order to graduate.

All students are subject to the requirements listed in the Graduate School of Biomedical Sciences (GSBS) Catalog and Student Handbook of Texas Tech University Health Sciences Center published at the time of admission as well as program guidelines. (https://www.ttuhsc.edu/biomedical-sciences/catalogs.aspx) New students are admitted prior to each fall term. Students are required to have a personal laptop computer which meets the general recommendations for laptop computer configurations listed on the GSBS Computer Requirements webpage. Please note these are general recommendations that could vary by program and faculty mentor.

A. Prerequisites for Admission

Applicants must have:

1. A bachelor's degree or the equivalent from an accredited college or university.

2. Adequate preparation for the proposed field of graduate study. Students may have an undergraduate degree in any field, but a strong science background is encouraged, including the completion of an undergraduate biochemistry course. Applicants must have completed or will complete the prerequisites for Texas Medical and Dental School Application Service (TMDSAS) medical school admission prior to matriculating into the program.

3. Results from either the Graduate Record Examination (General Test and, optional but recommended, the Subject Test in either Biology or Chemistry) or the Medical College Admissions Test (MCAT), with the scores forwarded directly to our institution for evaluation.
4. Two recent letters of recommendation (within 1 year), which must be from former faculty members, healthcare providers or administrators who are familiar with the scholastic abilities of the applicant.

5. An interview with the GMES Program committee.

Other admissions application requirements and deadline information are available on the GSBS website: https://www.ttuhs.edu/biomedical-sciences/academics/admissions.aspx

B. **Graduate School Requirements** – The GSBS requires a minimum of 36 hours of graduate-level course work before granting a Master’s degree.

C. **Program Mandates** – Courses needed to fulfill the required number of hours are listed in Appendix 3.

D. **Project** – Students will design and carry out a medical education project (assessed using the rubric shown in Appendix 5) under the direction of an appropriate faculty advisor (Appendix 2). The project will be designed according to the needs of the program and matched to the interest of the student. Examples of a project might include self-directed learning units/sessions, curriculum assessment, or upgrading or creating educational materials to be presented online. The student must choose a project prior to the beginning of the second year. Students will be given a list of possible projects or may choose a project of their own after consultation with the Program Director and faculty advisor (Appendix 6). The project must be approved by the Program Director. After the project is selected, the program Student Affairs Advocate (SAA) and student will work together to complete the Degree Plan.

Subsequent alterations to the project for any reason will require approval of the Program Director.

Second year students will present their project during Student Research Week and in a public seminar during the final Spring semester. The project and presentation will be evaluated by the program committee and faculty using Appendix 5. Successful completion of the project will be determined by the program committee. The project must be successfully completed to graduate.

Frequently, the results from these projects are substantial enough to warrant submission of an abstract to either a regional, national, or international meeting. The GMES program is committed to supporting these endeavors, if successful, to the extent that the budget will allow (see Appendix 9 for more information).

E. **Intent to Graduate** – Each student is required to file the Statement of Intent to Graduate with the GSBS office in the same semester the student will graduate. Generally, this deadline is at the beginning of each semester. For more information, please check with the GSBS office.

II. **Assessment of Graduate Student Progress (Appendix 1)**

The graduate student checklist is the major tool for assessing graduate student progress through the degree program. It is the student’s responsibility to ensure that all appropriate forms are signed and filed with the graduate coordinator according to deadlines. This checklist, Appendix 1, and the student’s file will be reviewed every summer or as needed to ensure and assess student progress by the program committee. It is expected that the student will maintain above-average ratings in all required assessment tools (Appendix 1), while always exhibiting a high level of professionalism (see below). Failure to maintain these standards may result in the student being placed on academic probation or dismissed from the program.
The program committee has the responsibility for monitoring the progress of the graduate student and can recommend dismissal of the student to the GSBS should the student fail to demonstrate adequate development and/or progress through the degree program.

Professional behavior:

In addition to exhibiting courtesy, compassion and decorum in all aspects of this program (as well as those outlined in the section below), professional behavior also includes participation in all mandatory events described in the Block Descriptions for Each SOM block. Failure to complete these activities may negatively influence students' final grades. Lack of professional behavior from GMES2 students may affect their standing with medical schools' Admissions Committees.

III. Program Requirements

A. Satisfactory Academic Standing – Every student enrolled is required to maintain a high level of performance and to comply fully with policies of the institution and the GMES graduate program. The GSBS reserves the right to place on probation or to dismiss any graduate student who does not maintain satisfactory academic standing or who fails to conform to the regulations of the university. Every student is expected to maintain a high level of commitment to professional development in a variety of areas. If any aspect of a student's professional development (for example, attention to teaching responsibilities, appropriate progress toward project goals, etc.) is considered to be unsatisfactory by either the program committee or the student's faculty advisor (if one has been appointed), the student shall be so informed in writing, along with a description of the recommended corrective action and the period of time allowed for the corrective action to be taken. If the student fails to correct the deficiency, the committee may recommend dismissal of the student from the program.

Students must attain a “B” or higher in all courses (Appendix 4). If the student either withdraws or attains a “C” in one of these courses, they will be required to retake the course the following year and attain at least a “B” grade. If the student makes less than a “C” in a course (“D” or “F”) or less than a “B” in two or more courses, they will be dismissed from the program. To remain in good academic standing with the graduate school, students must maintain a GPA of 3.0 in each semester. If the student drops below a 3.0 for any semester, he or she will be placed on academic probation. If the student attains less than 3.0 in any subsequent semester, they will be dismissed from the program. Failure to meet appropriate deadlines outlined in the degree program checklist (Appendix 1) or unprofessional conduct by the student could result in the student being placed on GMES program probation.

In addition to program grade requirements, students will be further evaluated for progress by the course directors in GMDS 5001, GMDS 5020, GMDS 5021, GMDS 5022, GMDS 5023, and GMDS 5024 using Appendix 7. Course directors will review this appendix with each student. This appendix will also be reviewed by the Program Director (or Associate Director) and student.

B. Course Waiver Procedure – Students requesting a waiver for a program-required course should follow these steps:

1. The student will make a written request to the program advisor outlining the course(s) to be waived, the reasons why the waiver is requested, and which, if any, previous graduate level courses addressed the same material as the waived course. The student must provide the program advisor with the relevant course syllabus.
2. The program advisor will forward the request to the program committee for consideration and request a vote on the waiver request.
3. The student will be notified of the voting results by email.
C. **Grievances and Appeals**

Student Appeals Policy – This policy applies to specific grievances arising from matters affecting students' academic standing and performance such as disputes concerning projects and project presentations. Appeals may be made only when alleged prejudicial, arbitrary or capricious action is involved, or new evidence relevant to an adverse decision is discovered. The burden of proof of unfair influence or action rests with the student.

A student wishing to appeal a decision or action should first discuss the matter with the faculty member or members involved. If the student is not satisfied with the outcome of this discussion, the student should contact the Program Director. This contact, like that with the faculty members, normally is informal, and the Program Director may take whatever action he or she deems advisable in attempting to resolve the issue. All parties involved should make every effort to resolve the issue without going beyond this level. The program advisor may consult with either the program committee (excluding the Dean of the GSBS) or an ad hoc committee of graduate faculty from the program (when the appeal is of an action taken by the program committee or a substantial proportion of its elected members) for advice regarding actions in an appeal. If the student still is not satisfied following these meetings and discussions, the student may make a formal appeal to the Dean of the GSBS. The appeal shall be processed according to the rules of the GSBS in effect at the time it is filed with the Dean.

D. **Leave of Absence**

A leave of absence may be requested by submitting a written request to the program advisor at the beginning of the semester and must specify the reason for the request.

The GSBS has a Leave of Absence policy, located in the 2024-2025 GSBS catalog under General Information – Leave of Absence, which states:

“Any student who fails to register for three consecutive semesters (12 months) and who does not have an official leave of absence from study is subject to review for readmission by the standards in effect at the time of reconsideration. Official leave of absence, which is granted by the GSBS Office upon recommendation of the Program Director, may be granted only in cases of serious medical conditions and other exceptional reasons. Typically, leaves of absence will not exceed one year and do not extend the maximum time allowed for degree completion.”

Students granted a leave of absence must submit written confirmation to the Program Director of their intent to return to the program one month prior to their intended return. A student who returns from a leave of absence must ensure that all obligations associated with their return, including timely registration for the appropriate semester, are met.

Requests to extend a leave of absence beyond one year must also be submitted in writing to the Program Director and will only be granted under unusual circumstances. In addition, the student must have been in good academic standing at the time of the original request. If a leave of absence request is denied and the student does not continue in the curriculum, the student will be considered to have withdrawn from the program. The student may reapply for admission to the program but will be subject to the same requirements and deadlines as other prospective students.
E. Course remediation and class standing

Any student who is required to re-take (for any reason) one or more of the required courses will not advance with their entering cohort or graduate with their incoming class, but will instead repeat the year; i.e., a GMES1 student who must remediate a course will remain a GMES1 student for the next academic year.

F. Additional Specific Information

1. Registration – A student must be registered for a minimum of 1 hour in the semester that he/she intends to graduate. Students will register for a minimum 9 hours for each long semester (fall and spring) and may register for up to 6 hours for the summer session.

2. There is no requirement for a foreign language or a minor.

3. Appendix 8 lists all courses offered by the GMES Program.

4. Degree plans are subject to change as the program guidelines are revised.

5. All students are required to complete (and show evidence for completion) at least one registered IPE (Interprofessional Education) event.

IV. Program Constitution and Policies

A. Program Committee Composition and Responsibilities

The program committee consists of nine members (the Dean of the GSBS, six other faculty members, and two student representatives). The six "core" faculty members serve at the pleasure of the Dean of the GSBS. The Dean of the GSBS serves as an ex officio member (voting only in the case of a tie). The chair of the committee is appointed by the Dean of the GSBS and acts as the Program Director. The Dean also appoints a Program Advisor from the other five faculty committee members. The responsibilities of the Program Director and the Program Advisor are listed in Appendices 10 and 11.

Specific functions of the program committee are to: 1) oversee the general governance of the program, 2) review and accept students into the program, 3) oversee content of the required courses, 4) ensure that course directors are providing the students with a syllabus that clearly outlines course contents and grading policies, 5) annually evaluate student progress, and 6) conduct the 5-year GSBS graduate faculty review. The program committee will serve as the entering students' advisory committees.

The Program Director will serve as one of the program's two representatives to the TTUHSC Graduate Council. The second representative to Graduate Council will be the Program Advisor.

B. Student representatives to the program committee:

Two student representatives to the program committee will be selected by GMES students in the Spring of year 1. They will be expected to attend all program committee meetings during the academic year, where they will:

1. Relay questions and concerns from the GMES students to the committee,
2. Participate in discussions by the committee, except where such participation would represent a conflict of interest, and
3. Assist in the admissions process, as requested by the faculty of the program committee. Students will not be considered to be voting members of the committee, except when asked by the Program Committee.

C. Proposing Changes to the Guidelines of the Program in GMES

The general governance of the program including changes to the guidelines is the primary responsibility of the program committee. However, any member of the GMES graduate faculty has the right to recommend a change in the GMES program by presenting a written document to the Program Director. The Program Director will then call together the program committee to discuss the proposed change. All changes must conform with the policies of the Graduate Bylaws of the GSBS (TTUHSC). The program committee must then make a recommendation (in favor of, or opposed to, the suggestion) to the Program Director for a final decision. The Program Director will then be responsible for formally revising the guidelines.
## Appendix 1: Graduate Medical Education Sciences Student Checklist

<table>
<thead>
<tr>
<th>GA Approval</th>
<th>Requirements</th>
<th>Appendix</th>
<th>Date Completed</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Introduction to Program Director and Graduate Coordinator to Receive Guidelines and Checklist</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Reviewed Sample Curriculum with Program Director</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Completed IPE Activity prior to Graduation</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### Fall Semester Year 1

|             | GSBS 5000 Interprofessional Collaborative Practice |          |               |
|             | GMDS 5001 Graduate Human Anatomy, Histology & Embryology | 8        |               |
|             | GMDS 5021 Introduction to Biochemistry, Cell Biology, Inflammation and Infection | 8        |               |

### Spring Semester Year 1

|             | GMDS 5020 Introduction to Immunology, Hematology, and the Cardiovascular System | 8        |               |
| Choose One: | GMDS 5110 Surgical Gross Anatomy OR GMDS 5006 Advanced Dissection Skills |          |               |
|             | Meet with Faculty Regarding Educational Project |          |               |
|             | Select an Educational Project | 6        |               |
|             | Submit Degree Program to GSBS |          |               |

### Fall Semester Year 2

|             | FERPA Training |          |               |
|             | GMDS 5023 Advanced Training in Anatomy, Histology & Embryology Education | 8        |               |
|             | GMDS 5024 Advanced Training in Biochemistry & Infectious Disease | 8        |               |
|             | GMDS 7000 Research (3 Hours) Begin Project | 8        |               |

### Spring Semester Year 2

|             | Submit Intent to Graduate to GSBS |          |               |
|             | GMDS 5310 Educational Project in Biomedical Sciences (Complete Project) | 5        |               |
|             | GMDS 5022 Advanced Training in Immunology, Hematology, and the Cardiovascular System | 8        |               |
|             | GMDS 5121 Pedagogical Concepts in Medical Education | 8        |               |
|             | GMDS 7000 (3 Hours) – Complete Project | 8        |               |
|             | GSBS 5101 Responsible Conduct of Research | 8        |               |

See checklist for graduation deadlines from the GSBS website.
Appendix 2: Graduate Faculty of the Program

**Professors**
Jannette Dufour, Ph.D.
Cheryl Erwin, J.D., Ph.D.
Betsy Jones, Ed.D.
Fiona Prabhu, MD
Brandt Schneider, Ph.D.
Dan Webster, Ph.D.

**Associate Professors**
Gurvinder Kaur, Ph.D.
Keith Bishop, PT, Ph.D.
Cassandra Kruczek, Ph.D.

**Assistant Professors**
Alice Villalobos, Ph.D.
Chip Shaw, Ed.D.
Christine Prater-Wood, Ph.D.

**Faculty Associate**
Anthony Hewetson, M.S.

**Graduate Program Committee:**

- Dan Webster: Permanent Position as Program Director
- Gurvinder Kaur: Permanent Position as Program Advisor
- Jannette Dufour: Permanent Position
- Cassandra Kruczek: Permanent Position
- Brandt Schneider: Permanent ex officio Member
- Anthony Hewetson: Permanent Position

**Graduate Council:**

- Dan Webster: Permanent Position as Program Director
- Gurvinder Kaur: Permanent Position as Program Advisor
## Appendix 3: Required Graduate Medical Education Sciences Program Curriculum

### Curriculum

Students will take courses in the anatomical and physiological sciences and in modern instructional methods and design, and will participate in the teaching mission of the medical school as teaching assistants. Elective courses are also listed in Appendix 8.

### YEAR 1

<table>
<thead>
<tr>
<th>Prefix/Number</th>
<th>Course Title</th>
<th>SCH</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Fall Term</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>GSBS 5000</td>
<td>Interprofessional Collaborative Practice</td>
<td>0</td>
</tr>
<tr>
<td>GMDS 5001</td>
<td>Graduate Human Anatomy, Histology &amp; Embryology</td>
<td>6</td>
</tr>
<tr>
<td>GMDS 5021</td>
<td>Introduction to Biochemistry, Cell Biology, Inflammation and Infection</td>
<td>6</td>
</tr>
<tr>
<td></td>
<td></td>
<td>12</td>
</tr>
<tr>
<td><strong>Spring Term</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>GMDS 5020</td>
<td>Introduction to Immunology, Hematology, and the Cardiovascular System</td>
<td>10</td>
</tr>
<tr>
<td>GMDS 5110</td>
<td>Surgical Gross Anatomy and/or</td>
<td>1</td>
</tr>
<tr>
<td>GMDS 5006</td>
<td>Advanced Dissection Skills</td>
<td>3</td>
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<tr>
<td></td>
<td></td>
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</table>

### YEAR 2

<table>
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<tr>
<th>Prefix/Number</th>
<th>Course Title</th>
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</thead>
<tbody>
<tr>
<td><strong>Fall Term</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>GMDS 5023</td>
<td>Advanced Training in Anatomy, Histology &amp; Embryology</td>
<td>3</td>
</tr>
<tr>
<td>GMDS 5024</td>
<td>Advanced Training in Biochemistry &amp; Infectious Disease</td>
<td>3</td>
</tr>
<tr>
<td>GMDS 7000</td>
<td>Research (<em>Begin project.</em>)</td>
<td>3</td>
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<tr>
<td></td>
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<td>9</td>
</tr>
<tr>
<td><strong>Spring Term</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>GMDS 5022</td>
<td>Advanced Training in Immunology, Hematology, and the Cardiovascular System</td>
<td>3</td>
</tr>
<tr>
<td>GMDS 5310</td>
<td>Educational Project in Biomedical Sciences</td>
<td>3</td>
</tr>
<tr>
<td>GMDS 5121</td>
<td>Pedagogical Concepts in Medical Education</td>
<td>1</td>
</tr>
<tr>
<td>GMDS 7000</td>
<td>Research (<em>Complete project</em>)</td>
<td>3</td>
</tr>
<tr>
<td>GSBS 5101</td>
<td>Responsible Conduct of Research</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td></td>
<td>11</td>
</tr>
</tbody>
</table>

**PROGRAM TOTAL** 43-46
Appendix 4: Grading Scale

Grading Scale for the following courses:

GMDS 5001 Graduate Human Anatomy, Histology & Embryology
GMDS 5021 Introduction to Biochemistry, Cell Biology, Inflammation and Infection
GMDS 5020 Introduction to Immunology, Hematology, and the Cardiovascular System

A, B, C, D, or F cumulative score as graded on the written and practical exams.

86.50 and Above = A
74.50 – 86.49 = B
69.50 – 74.49 = C
64.50 – 69.49 = D
64.49 and Below = F

Refer to syllabus for grading scale in all other courses.
Appendix 5: Project Presentation Evaluation Form

Date: ________________________________  Evaluator: ________________________________

Student: __________________________________________________________________________

(The scale (5-1) corresponds to letter grades of A-F. An overall average of 4/5 is required to achieve a "B" for the presentation.)

Mark the appropriate box for each statement. (50 points possible)

<table>
<thead>
<tr>
<th>The Project</th>
<th>Outstanding 5</th>
<th>Above Average 4</th>
<th>Average 3</th>
<th>Below Average 2</th>
<th>Inadequate 1</th>
<th>Not Applicable</th>
</tr>
</thead>
<tbody>
<tr>
<td>The project represented a meaningful contribution to the educational goals of the program.</td>
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<tr>
<td>The educational issue that this project addressed was made clear.</td>
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<tr>
<td>The methods were appropriate and presented clearly.</td>
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<tr>
<td>Data were presented clearly and were analyzed and interpreted properly, using statistics where appropriate.</td>
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<tr>
<td>The discussion included possible alternatives and study limitations.</td>
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<tr>
<td>The significance of the project was stated clearly.</td>
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<tr>
<td>The Presentation</td>
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<tr>
<td>The slides were readable, illustrating concepts and data, and in logical order.</td>
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<tr>
<td>The student was engaging, spoke clearly and provided smooth transitions from slide to slide.</td>
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<tr>
<td>Questions were answered in a confident and knowledgeable fashion.</td>
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<tr>
<td>The student was able to respond to criticism and suggestions readily, and was able to defend their presentation appropriately.</td>
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</table>

Comments:

___________________________________________________________________________

___________________________________________________________________________

___________________________________________________________________________

___________________________________________________________________________

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___________________________________________________________________________

___________________________________________________________________________
Appendix 6: Graduate Medical Education Sciences Project Advisor Agreement

To: The Program Director of Graduate Medical Education Sciences

From: The Graduate Student

Subject: Selection of the MS Graduate Medical Education Sciences Project Advisor

Date: ________________________________

The two parties who have signed below mutually agree to begin a formal Graduate Student-Major Advisor relationship directed toward the goal of earning a MS degree for the student.

Student's Signature

__________________________________________

Project Advisor (Please Print)

__________________________________________

Project Advisor's Signature

__________________________________________

Project Name

__________________________________________

__________________________________________

Program Approval:

__________________________________________

Program Advisor’s Signature

__________________________________________
Appendix 7: Course Directors Evaluation of Student Progress – Graduate Medical Education Sciences

Date:  
Student:  
Course:  
Evaluator:  

Mark the appropriate box for each statement.  
The scale (5-1) corresponds to letter grades of A-F. An overall average of 4/5 is required to achieve a "B" in the course.

<table>
<thead>
<tr>
<th></th>
<th>Outstanding 5</th>
<th>Above Average 4</th>
<th>Average 3</th>
<th>Below Average 2</th>
<th>Inadequate 1</th>
<th>Not Applicable</th>
</tr>
</thead>
<tbody>
<tr>
<td>Preparedness for Lecture/Lab/Prelab Sessions</td>
<td></td>
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<tr>
<td>Active Engagement</td>
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<tr>
<td>General Communication Skills</td>
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<tr>
<td>General Comprehension of the Material</td>
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<tr>
<td>Extra Items: Study Sessions, Generation of Practice Exams, etc. (as applicable)</td>
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<tr>
<td>Overall Student Progress (Overall progress score is an overall reflection of the subscores but not necessarily a numerical average of the subscores.)</td>
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</tbody>
</table>

Comments:

Date Reviewed by Program Advisor: 

_____________________________
Appendix 8: GMDS Program Courses Offered

5001 Graduate Human Anatomy, Histology & Embryology (V1-9:1-9:0). This course comprises a highly integrated study of human macroscopic and microscopic anatomy (including human dissection and both light and electron microscopy) which begins with the normal structure and function of the developing embryo as well as the mature body and then describes changes in both that are associated with various clinical conditions. Finally, learners will be exposed to educational approaches to the study of the human body that are essential for future success in the field of health care.

5006 Advanced Dissection Skills (V1-6:0-3:18). Students will review and conduct specialized dissections in the anatomy lab. The students will learn and practice advanced dissection skills designed to prepare specific teaching materials to demonstrate anatomical structures. Prerequisites: GMDS 5001. Registration restricted to students admitted to the Graduate Medical Education Sciences program.

5007 Advanced Ultrasound Skills (V1-3:0-3:9). Students will learn to show how to utilize ultrasound imaging to visualize and teach advanced topics in anatomy and physiology Prerequisites: GMDS 5001. Registration restricted to students admitted to the Graduate Medical Education Sciences program.

5020 Introduction to Immunology, Hematology, and Cardiovascular System (V1-12:1-12:0). This course is designed to provide students with fundamental information concerning the immune, hematopoietic and cardiovascular system. Normal function (histology and physiology) will be covered followed by disorders and pathophysiology, including infections, affecting each system. This will impart a deeper understanding that will allow students to achieve future success as either teachers or healthcare workers.

5021 Introduction to Biochemistry, Cell Biology, Inflammation and Infection (V1-12:1-12:0). This course is designed to provide students with fundamental information concerning the traditional areas of biochemistry, genetics, cell biology, pharmacology, pathology and microbiology. The principles presented in this course will proceed from molecules to cells and then to tissues and organs, integrating structure and function in a way that will impart a deeper understanding that will allow students to achieve future success as either teachers or healthcare workers.

5022 Advanced Training in Immunology, Hematology & the Cardiovascular System (V1-6:1-6:0). Students will lead and participate in designated small-group review sessions, team-based learning sessions, simulations, and laboratory sessions for the medical school class, attend all lectures and designated laboratory sessions as teaching assistants, and participate in all pre-laboratory meetings in preparation for the laboratory sessions. Students will also proctor both the unit exams and the NBME final exam, as needed.

5023 Advanced Training in Anatomy, Histology & Embryology Education (V1-6:1-6:0). Students will participate in the gross anatomy and histology laboratories as teaching assistants, attend all pre-laboratory meetings, present at select pre-laboratory meetings, oversee prosection presentations during scheduled lab hours, attend all lectures in preparation for the laboratory sessions, assist in the preparation of practical exams, proctor exams, ultrasound sessions and STS sessions as needed, and schedule, organize, and conduct review sessions.

5024 Advanced Training in Biochemistry & Infectious Disease (V1-6:1-6:0). Students will lead and participate in designated small-group review sessions, team-based learning sessions for the medical school class, attend all lectures and designated laboratory sessions as teaching assistants, and participate in all pre-laboratory meetings in preparation for the laboratory sessions. Students will also proctor both the unit exams and the NBME final exam, as needed.

5099 Topics in Graduate Medical Education Sciences (V1-6:1-6:0). Specific areas in Graduate Medical Education Sciences or related areas not normally included in other courses. May be repeated for credit with change of content. Registration restricted to students admitted to the Graduate Medical Education Sciences program.

5110 Surgical Gross Anatomy (1:1:0). Introduction and overview to surgical approaches to different regions of the human body from a clinical perspective. Students will observe and assist surgeons with surgical dissections of cadavers. Prerequisite: GMDS 5001. Registration restricted to students admitted to the Graduate Medical Education Sciences program.

5121 Pedagogical Concepts in Medical Education (1:1:0). The course is intended to provide a graduate-level foundation for understanding important concepts that guide current medical education pedagogy. To accomplish this goal,
Appendix 8: GMDS Program Courses Offered (continued)

papers from literature will be selected by the instructors for reading and subsequent discussion by the group. Registration restricted to students admitted to the Graduate Medical Education Sciences program.

5310 Educational Project in Biomedical Sciences (3:0:0). Students will design and carry out an educational project related to topics in medical education. The project will be designed according to the needs of the medical courses and matched to the interest of the student. Registration restricted to students admitted to the Graduate Medical Education Sciences program.

7000 Research (V1-9:0:0). Research.

GSBS Interdisciplinary Course:

5000 Interprofessional Collaborative

5101 Responsible Conduct of Research (1:1:0). This course will address the regulatory and ethical environment of today's biomedical research as well as such topics as authorship and data management. The class format is lectures and case discussions. Course is required for all GSBS students.
Appendix 9: Support of Student Travel – Policy and Procedures

1. Requirements for travel support:
   A. Faculty advisors will inform the Program Committee at their earliest convenience that one or more of their students may seek travel support from GMES.
      a. The faculty advisor will inform the Program Committee of the location, the submission deadline and the dates of the conference in a timely manner.
      b. Faculty advisors will estimate the total budget for their student(s) to attend a particular conference, including costs of registration, housing, and airfare. Travel to international destinations may receive further scrutiny by the Program Committee.
   B. If available, students will apply for any travel awards offered by the host society, and notify the Program Committee (ASAP) of both the application for, and receipt of, any such award. Students should work with their Project Advisors to determine if such awards are available and for all of the requirements to compete for such awards.
   C. Faculty advisors will notify the Program Committee of any successful submission of an abstract.
   D. The student should be a presenting author on the abstract/submission to receive travel funds.
   E. No GMES student may receive travel support from GMES for more than one conference.

2. Procedure for dispersal of funds:
   A. The Program Committee will meet approximately once per month (or as needed) to evaluate the requested travel support.
   B. The Program Committee will support travel for all students who have fulfilled the requirements described above at a set amount that depends on the current travel budget.
   C. Students and their advisors will be encouraged to seek further funds from other sources.

3. Notification of receipt of travel support:
   A. Students will be notified of their "travel support status" as soon as possible, in order to allow them to plan and budget for their trip.
   B. Students must fill out all required forms from the "Student Travel Information" website (https://www.ttuhsc.edu/student-life/student-travel.aspx) as requested on that site. International travel will incur further interaction with the Foreign Travel website (https://www.ttuhsc.edu/global-health/foreign-travel-approval.aspx) within the Global Health office.
   C. Students will consult with the GSBS Office to arrange payment that arise before the conference begins (e.g., pre-registration). Most other costs will be reimbursed after returning from the conference.
   D. If a student decides not to attend a conference that they applied for previously, they should notify the Program Committee ASAP so that these funds may be utilized to support other student travel applications.

4. Miscellaneous: Accrual of student travel funds may be facilitated either by faculty or departmental donations to a special Travel Fund for GMES, or any activities (e.g., bake sales) that are deemed to be acceptable by the GSBS office and Dean.

5. List of medical education societies that host annual conferences, with their due-dates for abstract submission (where known).
   A. IAMSE (Int'l Assoc. of Med. Science Educators):
      a. In-person **deadline**--December 1st. **Meeting** is in June.
      b. Virtual meeting--variable; relatively new meeting. **Meets** in October.
   B. SGEA (Southern Group on Educational Affairs) In-person deadline--usually October. Meeting mid-April.
   C. AACA (American Association of Clinical Anatomists) In-person meeting June-July.
Appendix 9: Support of Student Travel – Policy and Procedures (continued)

D. ABE (Assoc. of Biochemistry Educators) Every other year; next meeting in 2025. Deadline-late February.
F. AMEE (Association of Medical Educators-Europe) Meetings always held overseas.
G. STFM (Society of Teachers of Family Medicine) Check website for abstract deadline, meeting dates.
H. ASBPB (Association of STEMM Pathway and Bridge Programs; all virtual) Check website for abstract deadline, meeting dates.
Appendix 10: JOB TITLE: Program Director – Graduate Medical Education Sciences
Graduate School of Biomedical Sciences

JOB SUMMARY: The Program Director will be appointed by the Dean of the Graduate School of Biomedical Sciences. This is a leadership position within the GMES program. Duties are assigned by the Dean of the Graduate School for Biomedical Sciences.

ESSENTIAL DUTIES and RESPONSIBILITIES:

The Program Director for the Graduate Medical Education Sciences program shall serve as a member at Graduate Council and shall have voting privileges. The Director will report monthly at Graduate Council on student progress. Additional duties include:

a. The Program Director will direct and oversee the GMES program.
b. Manage advisor and other elected or appointed program committee members to ensure cooperation and successful participation in the program. This includes verification of courses taught by faculty each semester.
c. Coordinate with Program Advisor and GSBS staff in directing the GMES program.
d. Advising GMES students with courses, progress and other issues that may arise.
e. Mentor academically struggling students and provide action plan to GSBS.
f. Oversee, mentor and evaluate student medical education projects.
g. Review GMES guidelines and provide updates by July 1 of every year.
h. Review curriculum, objectives, policies, and procedures.
i. Attend/participate in monthly GMES meetings.
j. Attend monthly GMES student lunch meetings.
k. Review website annually and notify GSBS of any updates.
l. Participate in the recruitment process for selection of candidates.
m. Participate in the admission process for selection of candidates and provide justification on ballots.
n. Participate as requested during orientation of matriculating students, and faculty/student functions.
o. Make time available for student meetings as requested.
p. Participation in Program Review for GMES, which includes creating the self-study report and providing feedback on external report.
q. Ensure compliance with relevant rules, regulations, policies and procedures among faculty and students.
r. Other duties as assigned by GSBS Dean.
Appendix 11: JOB TITLE: Program Advisor – Graduate Medical Education Sciences  
Graduate School of Biomedical Sciences

JOB SUMMARY: The Graduate Advisor will be appointed by the Dean of the Graduate School of Biomedical Sciences. This is a leadership position within the GMES program. Duties are assigned by the Program Director or Dean of the Graduate School for Biomedical Sciences.

ESSENTIAL DUTIES and RESPONSIBILITIES:

The Advisor for the Graduate Medical Education Sciences program shall serve as a member at Graduate Council and shall have voting privileges. The advisor will report at Graduate Council on student progress in the absence of the Director. Additional duties include:

a. Advising GMES students with courses, progress and other issues that may arise.
b. Mentor academically struggling students and provide documented plan to GSBS.
c. Oversee, mentor and evaluate student medical education projects.
d. Review GMES guidelines, curriculum, objectives, policies, and procedures.
e. Attend/participate in monthly GMES meetings.
f. Attend monthly GMES student lunch meetings.
g. Participate in the recruitment process for selection of candidates.
h. Participate in the admission process for selection of candidates and assist the director with justification on ballots, if needed.
i. Participate as requested during orientation of matriculating students, and faculty/student functions.
j. Make time available for student meetings as requested.
k. Assist in self-study report during Program Review.
l. Other duties as assigned by Director or GSBS Dean.