I. **Course**

   A. **Catalog Description.** Cr. 3. (3-0). Pre-requisite: Doctoral standing or permission of the instructor. Prepares students for identifying, planning, collaborating, writing, budgeting, submitting, tracking, revising and managing grants.

   B. **Purpose.** This course introduces the student to the process of grantsmanship. This includes knowledge of sponsors and opportunities as well as practical “know-how” in writing competitive grants for supporting research in social service and health service provision. The emphasis of the course will be on federal grants, but state and foundation grants will also be cited as case illustrations.

II. **Course Objectives**

   A. Upon completion of this course, students will be able to:

   1. Demonstrate knowledge of a wide array of federal and foundation grant sources;
   2. Interpret grant program announcements;
   3. Plan grant writing strategies;
   4. Match intellectual interests with appropriate sponsor research areas;
   5. Demonstrate an understanding of key elements in research design and methods that are sought by sponsors;
   6. Develop and justify grant budgets;
   7. Demonstrate an understanding of the process used to procure letters of support and intent; and
   8. Delineate ethical issues related to the protection of human subjects and the role of the IRB.

III. **Course Structure**

   A. **Course Content.** This course will include the following topical (content) areas:

   1. A thorough review of grant mechanisms to support social/human services and health and mental health research. The focus will be on federal NIH
grants, particularly dissertation support (R36, F31) and early career funding (T and K awards, R03 and R21 mechanisms). Dissertation support from sources other than NIH (e.g., NASW, SSWR, and APA fellowships) will also be covered. Other federal, state and foundation grants will also be discussed, but will not be the focus of the class.

2. In-depth discussion on how to understand and respond to program announcements (PA’s), requests for proposals (RFP’s), and other types of funding announcements. This will include identifying the right funding mechanism for the researcher’s interest and career stage.

3. Understanding the grant submission and peer review process and the scoring of grant proposals, with a particular focus on the NIH review and scoring criteria. NIH protocols and procedures have changed significantly in recent years, and we will discuss the most current ones. We will also discuss various ways to stay abreast of changes.

4. Hands-on practice on grant writing, from early conceptualization and literature review, to refining concepts, writing the various pieces of the proposal (including human subject’s considerations and securing linkages and letters of support), putting the full proposal together, and submitting the grant application (with a focus on the electronic submission process, now required for all NIH grants). The emphasis will be on the NIH small research grant (R03), but other relevant mechanisms will also be covered (i.e., NIH dissertation funding; K and T awards; other professional organization [i.e., fellowships] and foundation dissertation funding; and the format for the GCSW Doctoral Qualifying Paper.)

5. Learning how to respond to reviewer’s comments and prepare a revised application. It is exceedingly rare for researchers to be funded on first submission. Thus, understanding and responding to reviewers’ comments and submitting a revised application are critical elements of successful grantsmanship.

6. This class is not a research methods class, and it is not a class on statistical analyses. Students are expected to have completed methodology and statistics courses prior to enrolling in this class. While we will discuss various methodological and analytical issues and concepts, they are not the focus of the class. The focus of the class is on understanding the grant writing process and on writing efficient, effective grant applications that have a high probability of being funded.

7. The class is also not a project management class. Demonstrating to reviewers that one has the proper resources, knowledge, and experience to effectively manage a grant-funded project is a critical issue. As such, we will discuss in class how to convey this to reviewers. However, in-depth coverage of grants management is beyond the purview of this course.
B. Course Structure.

1. The spring 2011 semester course will consist of 14 three-hour classes, plus outside readings and assignments.

2. Classes will include lectures facilitated by the professor; work in small groups; student submissions (segments of proposal throughout semester and final proposal at the end); and an on-going internal peer-review system (discussed later). Students will also be made aware of relevant activities (conferences, workshops, etc.) outside of class and encouraged to attend.

3. Class attendance, student participation, and reading assigned materials are all required. The more prepared students are for class, the more they will get out of the class. It is the instructor’s goal that at the end of the course the student will have a complete, solid draft of a dissertation proposal ready for submission and/or a complete, solid draft of their PhD qualifying paper.

IV. Textbooks

A. Required Texts & Reading. There are three required textbooks. Two have been ordered through the campus bookstore and through the M. D. Anderson library, and one is available at no cost from the National Academies Press:


B. Recommended Texts. The texts listed below include additional grant-writing resources. Other texts are listed covering areas such as APA style, quantitative and qualitative research methodologies, statistical analyses, ethics, understanding and reviewing the scientific literature, and evidence-based social work practice. Students are encouraged to select those that meet their individual needs.


C. **Journal Articles.** Peer-reviewed journal articles will be assigned and will be required reading. Students will be expected to conduct individual literature searches and literature reviews according to their areas of research. The UH library has full text articles online through the electronic resources section. Students are encouraged to register for remote access to the HAM-TMC Medical Library at the M. D. Anderson Library Service Desk, which allows students to access other journal resources. Students are also encouraged to obtain software to manage their references (e.g., Endnotes, Refworks, etc.) and to seek training in the use of their preferred software. Lee Hilyer, Associate Librarian in the M. D. Anderson Library, is a great resource on the use of Endnotes and other bibliographic software ([lahilery@uh.edu](mailto:lahilery@uh.edu), 713-743-9714).

D. Additional recommended texts/supplemental references and relevant websites. See section X: Bibliography.

V. **Course Requirements**

A. **Reading Assignments.** Students must complete all assigned readings prior to class and actively engage in class discussion and activities. Attendance and participation will count toward the final class grade (10% of grade). Of particular importance will be the internal peer review mechanism discussed below.

B. **Written Assignments.** Students will be required to submit sections of their proposals (e.g., specific aims, background and significance, etc.) as the semester proceeds, as per the outline in the syllabus. Timely submission and resubmission of these sections accounts for 20% of the final grade. The final, complete proposal will be due at the end of the semester and will be 45% of the final grade.

C. **Projects.** The group will function as an internal peer-review process. Beginning on the 5th class of the semester, students will hand in sections of their proposals, starting with the specific aims. Every week (starting week 5), students will review each other’s work as follows:
1. Students distribute the section due for that week (e.g., specific aims) via email to the entire class list **no later than 3 days prior to class**.

2. Two primary reviewers will be appointed ahead of time for each submission. These two students will be primarily responsible for reading the submitted section and providing detail feedback in class, following a mock review panel format. The professor will distribute a list of primary reviewers for each week.

3. Other students (other than the two primary reviewers for each submission) will be expected to read the submitted section as well and to add their comments and feedback in class.

4. The student whose submission is being reviewed is expected to remain silent and non-defensive, and to take in the comments and suggestions of the primary reviewers and the rest of the class. Earlier in the process reviewers can ask the student whose submission is being reviewed for some clarification. Later in the semester, however, this will no longer be allowed. Remember that NIH reviews are blind and that the researcher whose grant is being reviewed is not in the room and cannot clarify reviewer misunderstandings or answer questions that may arise. Thus, effective grant writing also involves anticipating reviewer's reactions, comments, and questions, and addressing them ahead of time through clear and concise writing.

5. Following this format, every week (starting week 5) students will present their work to be critiqued and be prepared to critique the work of fellow students. Active participation in the internal peer-review process (that is, providing feedback to other's work in class as scheduled) will be **20%** of the final grade.

**D. Exams.** The will be 5 unannounced quizzes throughout the semester. These will be on assigned readings, and the purpose of the quizzes is to encourage students to stay on top of their readings. Quizzes account for **5%** of the final grade.

**E. Attendance and class participation; interruptions/distractions.**

1. Due to our limited time together, attendance and class participation are critical for effective learning and are factored into the final grade at **10%** of the grade. They may also be taken into consideration should a student’s grade be marginal. Each absence will result in a 5 point loss, unless cleared a priori with the professor and excused. Students are expected to call/email Professor Torres ahead of time, whenever possible, to inform him of lateness and/or any absence. More than 3 absences may automatically result in a lower letter grade, and the professor reserves the right to ask the student to withdraw.

2. If a student misses a quiz due to an absence or lateness, the quiz cannot be made up.
3. To avoid disrupting class, students will turn off pagers and cell phones during class. If a special circumstances merits leaving a cell phone or beeper on, please discuss with the professor prior to the start of class. Laptops will be used regularly in class. Students are encouraged to use the laptop only for class purposes and to refrain from using them for anything unrelated to the class.

F. Summary of Class Requirements:

<table>
<thead>
<tr>
<th>Requirement</th>
<th>Percentage</th>
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</thead>
<tbody>
<tr>
<td>Attendance &amp; Participation</td>
<td>10%</td>
</tr>
<tr>
<td>Timely submission/resubmission of proposal sections</td>
<td>20%</td>
</tr>
<tr>
<td>Peer Reviewer Role</td>
<td>20%</td>
</tr>
<tr>
<td>Final, complete proposal</td>
<td>45%</td>
</tr>
<tr>
<td>Unannounced Quizzes</td>
<td>5%</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td><strong>100%</strong></td>
</tr>
</tbody>
</table>

VI. Evaluation and Grading

A. Grade Distribution

<table>
<thead>
<tr>
<th>Grade</th>
<th>Points Range</th>
</tr>
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<tbody>
<tr>
<td>A</td>
<td>96 to 100</td>
</tr>
<tr>
<td>A-</td>
<td>92 to 95.9</td>
</tr>
<tr>
<td>B+</td>
<td>88 to 91.9</td>
</tr>
<tr>
<td>B</td>
<td>84 to 87.9</td>
</tr>
<tr>
<td>B-</td>
<td>80 to 83.9</td>
</tr>
<tr>
<td>C+</td>
<td>76 to 79.9</td>
</tr>
<tr>
<td>C</td>
<td>72 to 75.9</td>
</tr>
<tr>
<td>C-</td>
<td>68 to 71.9</td>
</tr>
<tr>
<td>D</td>
<td>64 to 67.9</td>
</tr>
<tr>
<td>F</td>
<td>below 64 points</td>
</tr>
</tbody>
</table>

VII. Policy on grades of I (Incomplete)

The grade of "I" (Incomplete) is a conditional and temporary grade given when students are either (a) passing a course or (b) still have a reasonable chance of passing in the judgment of the instructor but, for non-academic reasons beyond their control have not completed a relatively small part of all requirements. Students are responsible for informing the instructor immediately of the reasons for not submitting an assignment on time or not taking an examination. Students must contact the instructor of the course in which they receive an “I” grade to make arrangements to complete the course requirements. Students should be instructed not to re-register for the same course in a following semester in order to complete the incomplete requirements.

The grade of "I" must be changed by fulfillment of course requirements within one year of the date awarded or it will be changed automatically to an "F" (or to a "U" [Unsatisfactory] in S/U graded courses). The instructor may require a time period of less than one year to fulfill course requirements and the grade may be changed by the instructor at any time to reflect work complete in the course. The grade of "I" may not be changed to a grade of W.
VIII. Course Schedule and Assignments

A. Assignments: As per section V above.

B. Course Schedule. The spring 2011 session runs for 14 weeks, from January 18th through April 26th 2011. Class will meet on Tuesdays from 9:00 AM until 12:00 PM, with a 10-minute break around 11:30 am.

C. Consultation. The professor is available to speak with students before/after class, during office hours, or by appointment.

D. Policy on Academic Dishonesty and Plagiarism.

Students are expected to demonstrate and maintain a professional standard of writing in all courses, do one’s own work, give credit for the ideas of others, and provide proper citation of source materials. Any student who plagiarizes any part of a paper or assignment or engages in any form of academic dishonesty will receive an “I” for the class with a recommendation that a grade of F be assigned, subsequent to a College hearing, in accordance with the University policy on academic dishonesty. Other actions may also be recommended and/or taken by the College to suspend or expel a student who engages in academic dishonesty.

All papers and written assignments must be fully and properly referenced using APA style format (or as approved by the instructor), with credit given to the authors whose ideas you have used. If you are using direct quotes from a specific author (or authors), you must set the quote in quotation marks or use an indented quotation form. For all direct quotes, you must include the page number(s) in your text or references. Any time that you use more than four or five consecutive words taken from another author, you must clearly indicate that this is a direct quotation. Please consult the current APA manual for further information.

Academic dishonesty includes using any other person’s work and representing it as your own. This includes (but is not limited to) using graded papers from students who have previously taken this course as the basis for your work. It also includes, but is not limited to submitting the same paper to more than one class. If you have any specific questions about plagiarism or academic dishonesty, please raise these questions in class or make an appointment to see instructor. This statement is consistent with the University Policy on Academic Dishonesty that can be found in your UH Student Handbook.

E. Statement on changes to syllabus. Dr. Torres reserves the right to revise the syllabus content and/or schedule for time management or topical reasons.
### F. Week-by-Week Schedule

#### Semester-at-a-Glance

<table>
<thead>
<tr>
<th>Week</th>
<th>Date</th>
<th>Topic</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Jan 18</td>
<td>Welcome/Class Overview; Introduction to NIH Grants/Funding Mechanisms: Finding the Match; Web Resources</td>
</tr>
<tr>
<td>2</td>
<td>Jan 25</td>
<td>NIH Peer Review Process; Specific Aims (Overview)</td>
</tr>
<tr>
<td>3</td>
<td>Feb 1</td>
<td>Specific Aims (Constructing Hypotheses)</td>
</tr>
<tr>
<td>4</td>
<td>Feb 8</td>
<td>Specific Aims (Building Conceptual Models)</td>
</tr>
<tr>
<td>5</td>
<td>Feb 15</td>
<td>Research Strategy: Significance; Start Internal Peer Review</td>
</tr>
<tr>
<td>6</td>
<td>Feb 22</td>
<td>Research Strategy: Innovation</td>
</tr>
<tr>
<td>7</td>
<td>Mar 1</td>
<td>Research Strategy: Approach (Overview of Research Design, Research Setting)</td>
</tr>
<tr>
<td>8</td>
<td>Mar 8</td>
<td>Research Strategy: Approach (Preliminary Studies; Specialized Personnel; Recruitment and Sampling)</td>
</tr>
<tr>
<td>9</td>
<td>Mar 22</td>
<td>Research Strategy: Approach (Data Collection; Outcome Measures; Data Management and Quality Control)</td>
</tr>
<tr>
<td>10</td>
<td>Mar 29</td>
<td>Research Strategy: Approach (Data Analyses; Power Analysis; Human Subjects)</td>
</tr>
<tr>
<td>11</td>
<td>Apr 5</td>
<td>Biosketch; Environment; Budgets; Appendices</td>
</tr>
<tr>
<td>12</td>
<td>Apr 12</td>
<td>Electronic Submissions; Responding to Reviewers</td>
</tr>
<tr>
<td>13</td>
<td>Apr 19</td>
<td>Putting it all together; Work on Final Proposals</td>
</tr>
<tr>
<td>14</td>
<td>Apr 26</td>
<td>Putting it all together; Work on Final Proposals</td>
</tr>
</tbody>
</table>

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**Week 1: January 18, 2011**

**Topics:**
- Welcome and class overview/review of syllabus
- Introduction to NIH Grants and Review of Funding Mechanisms
- Web Resources: NIH Reporter (Research Portfolio Online Reporting Tools; [http://projectreporter.nih.gov/reporter.cfm](http://projectreporter.nih.gov/reporter.cfm)); NIH Institutes

**Textbook Readings:**
- Scheier & Dewey Forward, Overview, Chapter 3, and Appendices 1 and 2
- Brewer & Achilles Introduction and Chs. 1-6

**Journal Articles:**

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**Week 2: January 25, 2011**

**Topics:**
- NIH Peer Review Process
- Specific Aims (Overview)

**Textbook Readings:**

• Scheier & Dewey Chapter 1
• Brewer & Achilles Chapters 7-11 and 13

Journal Articles:

Week 3: February 1, 2011

Topics:
• Specific Aims (Constructing Hypotheses)

Textbook Readings:
• Scheier & Dewey Chapters 2-3, 6-7, 11-12
• Brewer & Achilles Chapters 9-11
• Kline, Chapter 9

Journal Articles:

Week 4: February 8, 2011

Topics:
• Specific Aims (Building Conceptual Models)

Textbook Readings:
• Scheier & Dewey Chapter 3

Journal Articles:

Week 5: February 15, 2011

Topics:
• Research Strategy: Significance
• Draft 1 of Specific Aims Due
• Start Internal Peer Review

Textbook Readings:
• Russel & Morrison, Chapter 9
• Scheier & Dewey Chapter 3
Journal Articles:

Week 6: February 22, 2011

Topics:
- Research Strategy: Innovation
- Revised Draft of Specific Aims Due
- Internal Peer Review Process

Textbook Readings:
- Russel & Morrison, Chapter 9
- Scheier & Dewey Chapter 3

Journal Articles:

Week 7: March 1, 2011

Topics:
- Research Strategy: Approach (Overview of Research Design, Research Setting)
- First Draft of Innovation Due
- Internal Peer Review Process

Textbook Readings:
- Russel & Morrison, Chapter 10
- Scheier & Dewey Chapter 3
- Kline Chapters 3-5

Journal Articles:
Week 8: March 8, 2011

Topics:
- Research Strategy: Approach (Preliminary Studies; Specialized Personnel; Recruitment and Sampling)
- **First Draft of Approach (Overview of Research Design, Research Setting) Due**
- Internal Peer Review Process

Textbook Readings:
- Russel & Morrison, Chapters 10 & 11
- Kline Chapter 6

Journal Articles:

[NO CLASS March 15; UH Spring Recess 3/14-3/19]

Week 9: March 22, 2011

Topics:
- Research Strategy: Approach (Data Collection; Outcome Measures; Data Management and Quality Control)
- **First Draft of Approach (Preliminary Studies; Specialized Personnel; Recruitment and Sampling) Due**
- Internal Peer Review Process

Textbook Readings:
- Kline Chapter 7

Journal Articles:
Week 10: March 29, 2011

Topics:
- Research Strategy: Approach (Data Analyses; Power Analysis; Human Subjects)
- First Draft of Approach (Data Collection; Outcome Measures; Data Management and Quality Control) Due
- Internal Peer Review Process

Textbook Readings:
- Scheier & Dewey Chapters 4 & 16
- Russel & Morrison, Chapter 16

Journal Articles:

Week 11: April 5, 2011

Topics:
- Biosketch; Environment; Budgets; Appendices
- Draft of Revised Specific Aims and Approach Due
- Internal Peer Review Process

Textbook Readings:
- Scheier & Dewey Chapter 15
- Russel & Morrison, Chapters 12-13
Journal Articles:
- TBA

Week 12: April 12, 2011

Topics:
- Electronic Submissions; Responding to Reviewers
- Draft of Biosketch, Environment, Budgets, and Appendices Due
- Internal Peer Review Process

Textbook Readings:
- Scheier & Dewey Chapters 17 & 18
- Brewer & Achilles Chapter 12
- Russel & Morrison, Chapters 12-13

Journal Articles:
- TBA

Week 13: April 19, 2011

Topics:
- Putting it all together; Work on Final Proposals
- Complete Draft of Full Proposal Due for first half of class
- Internal Peer Review Process

Textbook Readings:
- Scheier & Dewey Chapter 19

Journal Articles:
- TBA

Week 14: April 26, 2011

Topics:
- Putting it all together; Work on Final Proposals
- Complete Draft of Full Proposal Due for second half of class
- Internal Peer Review Process

IX. Americans with Disabilities Statement.

Whenever possible, and in accordance with 504/ADA guidelines, the University of Houston will attempt to provide reasonable academic accommodations to students who request and require them. Please call 713-743-5400 for more assistance. Instructors may not provide accommodations without supporting documentation from the UH Center for Students with DisAbilities.
X. Bibliography.

Recommended Websites.

Center for Disease Control and Prevention (CDC): http://www.cdc.gov/
Council on Social Work Education http://www.cswe.org/
Foundation Center http://foundationcenter.org/
National Association of Social Workers http://www.naswdc.org/
National Center on Minority Health and Health Disparities http://ncmhd.nih.gov/
National Institutes of Health http://www.nih.gov/
National Institutes of Health Office of Extramural Research http://grants.nih.gov/grants/oer.htm
National Science Foundation http://www.nsf.gov/
Social Work Research Network: http://www.bu.edu/swrnet/
Southwest Alternate Media Project http://www.swamp.org/
US Census Bureau: http://www.census.gov/
US Census Bureau American FactFinder: www.factfinder.census.gov/home/saff/main.html?_lang=en
US Dept. of Health & Human Services, Office of Minority Health: http://www.omhrc.gov/