University of Florida

GMS 6951 Teaching Biomedical Science
for the Biomedical Scientist as Educator Certificate (BSaE-C)

2 credits

Instructor: Dr. Linda Behar-Horenstein, Distinguished Teaching Scholar and Professor
Tel: (352) 682-0768
E-mail: Lsbhoren@ufl.edu
Office Hours: Tuesday 1:00-3:00 p.m. or by appointment.

REQUIRED TEXTBOOK

2. Required readings as posted on the course Canvas website.

Materials and Supplies Fees
Students will be expected to pay the costs for taking the online assessments (the LTM and the HMI from aboutlearning.com)

I. Course Description
In the GMS 6951 Teaching Biomedical Science course, participants will acquire the skills necessary for creating and modifying courses through a combination of self-awareness activities and information drawn from the field of curriculum that informs teaching across content areas. Students will use their skills to: (a) write a teaching philosophy, (b) draft components of their own course syllabus, and (c) add these components to their biomedical scientist as educator portfolio.

This Biomedical Scientist as Educator course, GMS 6951 Teaching Biomedical Science will be taught using the online learning platform, Canvas, sponsored by the University of Florida to permit flexibility in the learning environment and to model online teaching for the prospective academician.

II. Course objectives

1. Document entry beliefs about instruction.
2. Write a personal teaching philosophy.
3. Assess your personal learning styles and its impact on your teaching.
4. Identify ways to assess biomedical science education student learning during instruction.
5. Write and present goals and learning objectives for a course syllabus.
6. Write and present goals evaluation methods for a proposes course syllabus.
7. Show how biomedical science course objectives, learning activities and assessments are aligned.
8. At the conclusion of the Biomedical Scientist as Educator course, GMS 6951 Teaching Biomedical Science write a 250-500 word essay about current instructional beliefs and identify the purpose of a minimum of two courses that the student plans to teach and adding these components to electronic biomedical science education portfolio.
9. Complete assigned reflective writing prompts.
III. PROFESSIONALISM, CLASSROOM ETIQUETTE, AND STUDENT ACCOMMODATIONS

Students Requiring Accommodations
Students with disabilities requesting accommodations should first register with the Disability Resource Center (352-392-8565, www.dso.ufl.edu/drc/) by providing appropriate documentation. Once registered, students will receive an accommodation letter which must be presented to the instructor when requesting accommodation. Students with disabilities should follow this procedure as early as possible in the semester.

Online Class Demeanor
Students are expected to be respectful to the instructor and to fellow students. Opinions held by other students should be respected in discussion, and conversations that do not contribute to the discussion should be held at minimum, if at all.

Attendance policy
Completion of all online discussions and related course assignments will constitute attendance. Thus, attendance is subsumed by each of the graded assignments. Excused absences must be consistent with university policies in the Graduate Catalog (http://gradcatalog.ufl.edu/content.php?catoid=10&navoid=2020#attendance) and require appropriate documentation. Additional information can be found here: https://catalog.ufl.edu/ugrad/current/regulations/info/attendance.aspx

University Honesty Policy
UF students are bound by The Honor Pledge which states, “We, the members of the University of Florida community, pledge to hold ourselves and our peers to the highest standards of honor and integrity by abiding by the Honor Code. On all work submitted for credit by students at the University of Florida, the following pledge is either required or implied: “On my honor, I have neither given nor received unauthorized aid in doing this assignment.” The Honor Code (https://www.dso.ufl.edu/sccr/process/student-conduct-honor-code/) specifies a number of behaviors that are in violation of this code and the possible sanctions. Furthermore, you are obligated to report any condition that facilitates academic misconduct to appropriate personnel. If you have any questions, please consult with the instructor.

Course Evaluation
Students are expected to provide feedback on the quality of instruction in this course by completing online evaluations at https://evaluations.ufl.edu. Evaluations are typically open during the last two or three weeks of the semester, but students will be given specific times when they are open. Summary results of these assessments are available to students at https://evaluations.ufl.edu/results/.
IV. COURSE REQUIREMENTS AND EVALUATION OF STUDENT PERFORMANCE

COURSE GRADING SCALE & EQUIVALENT POINTS

<table>
<thead>
<tr>
<th>Percent</th>
<th>Grade</th>
<th>Grade Points</th>
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<tbody>
<tr>
<td>90.0 - 100.0</td>
<td>A</td>
<td>4.00</td>
</tr>
<tr>
<td>87.0 - 89.9</td>
<td>A-</td>
<td>3.67</td>
</tr>
<tr>
<td>84.0 - 86.9</td>
<td>B+</td>
<td>3.33</td>
</tr>
<tr>
<td>81.0 - 83.9</td>
<td>B</td>
<td>3.00</td>
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<tr>
<td>78.0 - 80.9</td>
<td>B-</td>
<td>2.67</td>
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<tr>
<td>75.0 - 77.9</td>
<td>C+</td>
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<tr>
<td>72.0 - 74.9</td>
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<tr>
<td>69.0 - 71.9</td>
<td>C-</td>
<td>1.67</td>
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<tr>
<td>66.0 - 68.9</td>
<td>D+</td>
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<td>63.0 - 65.9</td>
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<td>0 - 59.9</td>
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- Completion of assigned reflective writing prompts – 10%

  Complete assigned reflective writing prompts and submit to instructor via CANVAS by midnight 2 days before the next scheduled session.

- 250-word teaching philosophy, initial draft – 10%

- 250-word essay that describes your preferred learning style, hemispheric mode indicator and how this informs how you learn best and describe how you will teach to students whose learning styles are distinctly different from your own -15%

- Goals and learning objectives for a course syllabus – 15%

- Draft and provide a rationale for the evaluation methods for a course syllabus - 10%

- Student presentation of goals and learning objectives for a course syllabus – 15%

- Student presentation of evaluation methods for a course syllabus – 15%

- 250-word teaching philosophy, final draft – 10%
## V. COURSE SCHEDULE

<table>
<thead>
<tr>
<th>WEEK # OF CLASS</th>
<th>SESSION TOPICS</th>
<th>MATERIALS TO BE PREPARED FOR NEXT CLASS SESSION</th>
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</thead>
</table>
| 1.              | Introduction to the Course. Review of Syllabus. **Instructor Presentation** - Purposeful teaching. What is it? | **Read:**  
- Zull - Chapters 1 & 2  
- Gibbs Jr KD, McGready J, Bennett JC  
**Do:**  
- In 250-500 words, respond to the following the prompts:  
  1. Describe one new fact or concept that you learned during this session.  
  2. Describe one question or concern that you have after viewing this session.  
  3. Describe something useful or practical that learned during this session that you can apply as a biomedical scientist educator. |
| 2.              | **Instructor Presentation** - Relationships between curriculum instruction, teaching and learning, and their impact on planning to teach | **Read:**  
- Zull - Chapter 3  
- Parkinson - Are the concepts of andragogy and pedagogy relevant to veterinary undergraduate teaching? (J Vet Med Ed)  
**Do:**  
- In 250-500 words, respond to the following the prompts:  
  1. Describe one new fact or concept that you learned during this session.  
  2. Describe one question or concern that you have after viewing this session.  
  3. Describe something useful or practical that learned during this session that you can apply as a biomedical scientist educator. |
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| 3.             | **Instructor Presentation** - Personal beliefs about teaching and learning and how their relationship planning for instruction | **Read:**  
• Zull - Chapter 4  
• Crawford, et al. - Comparison of learning styles of pharmacy students and faculty members (Am J Pharm Ed)  
**Do:**  
Using a set of instructor-prepared prompts, students will write and submit a draft a 250-word (minimum) teaching philosophy to the instructor. |
| 4.             | **Instructor Presentation** – Differences in students as learners, learning styles, and neuro-mythologies | **Read:**  
• Zull - Chapter 5  
**Do:**  
• AboutLearning.com’s LTM and HMI. There is a material charge for taking these inventories online.  
• Submit a 250-word essay that describes your preferred learning style, hemispheric mode indicator and how this informs how you learn best. Describe how you will teach to students whose learning styles are distinctly different from your own. |
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| 5.             | Instructor Presentation - Differentiating learning objectives: Teaching for low versus higher level outcomes | **Read:**  
  - Zull - Chapter 6  
  - Schoenfeld-Tacher - Course Goals, Competencies, and Instructional Objectives (J Vet Med Ed)  

**Do:**  
- In 250-500 words, respond to the following prompts:  
  1. Describe one new fact or concept that you learned during this session.  
  2. Describe one question or concern that you have after viewing this session.  
  3. Describe something useful or practical that you learned during this session that you can apply as a biomedical scientist educator.  

Post reply online –  
Describe one learning activity where you teach or have been taught using ordinary thinking skills and explain one teaching activity that you implemented or experienced can be changed to promote critical thinking skills. |
| 6.             | Instructor Presentation – Writing learning objectives: The ABCs | **Read:**  
  - Zull - Chapter 7  
### V. COURSE SCHEDULE CONT’D

<table>
<thead>
<tr>
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<th>MATERIALS TO BE PREPARED FOR NEXT CLASS SESSION</th>
</tr>
</thead>
</table>
| 7.              | **Instructor Presentation** - Differentiating learning objectives by taxonomies for intended outcomes | Read:  
  - Zull - Chapter 8  
  - Rich - Proposing a Model of Co-Regulated Learning for Graduate Medical Education (Acad Med)  
  Do:  
  - In 250-500 words, respond to the following prompts:  
    1. Describe one new fact or concept that you learned during this session.  
    2. Describe one question or concern that you have after viewing this session.  
    3. Describe something useful or practical that learned during this session that you can apply as a biomedical scientist educator. |
| 8.              | **Instructor Presentation** – Encouraging self-regulated learning among students | Read:  
  - Zull - Chapter 9 |
| 9.              | **Instructor Presentation** – Assessing student learning: What are the right techniques? | Read:  
  - Zull - Chapter 10  
  - Zelenitsky - Using Curriculum Mapping to Engage Faculty Members in the Analysis of a Pharmacy Program (Am J Pharm Ed)  
  Do:  
  - In 250-500 words, respond to the following prompts:  
    1. Describe one new fact or concept that you learned during this session.  
    2. Describe one question or concern that you have after viewing this session.  
    3. Describe something useful or practical that learned during this session that you can apply as a biomedical scientist educator. |
| 10.             | **Instructor Presentation** – Components of a Syllabus | Read:  
  - Zull - Chapter 11  
  - Turnwald et al. -Design and implementation of curriculum change (Rev. sci. tech. Off. int. Epiz) |
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</table>
| 11.            | **Instructor Presentation**  
Analyzing course syllabi  
Students will use existing skills to describe how course objectives, learning activities and assessments are aligned.  
Students will use instructor supplied syllabi to analyze and critique | **Read:**  
- Zull - Chapter 12  
| 12.            | Instructor-facilitated group work | **Do:**  
- Using instructor provided template, write and submit draft goals and learning objectives for a course syllabus |
| 13.            | Student presentation of goals and learning objectives for a course syllabus | **Do:**  
- Using instructor provided template, draft the evaluation methods for a course syllabus. |
| 15.            | Student presentations of evaluation methods for course Syllabus. | |
VI. Bibliography


Software Use
All faculty, staff, and students of the University are required and expected to obey the laws and legal agreements governing software use. Failure to do so can lead to monetary damages and/or criminal penalties for the individual violator. Because such violations are also against University policies and rules, disciplinary action will be taken as appropriate. We, the members of the University of Florida community, pledge to uphold ourselves and our peers to the highest standards of honesty and integrity.

Student Privacy
There are federal laws protecting your privacy with regards to grades earned in courses and on individual assignments. For more information, please see: http://registrar.ufl.edu/catalog0910/policies/regulationferpa.html

Campus Resources:
Health and Wellness
**U Matter, We Care:**
If you or a friend is in distress, please contact umatter@ufl.edu or 352 392-1575 so that a team member can reach out to the student.

**Counseling and Wellness Center:** [http://www.counseling.ufl.edu/cwc](http://www.counseling.ufl.edu/cwc), and 392-1575; and the University Police Department: 392-1111 or 9-1-1 for emergencies.

**Sexual Assault Recovery Services (SARS)**  
Student Health Care Center, 392-1161.

**University Police Department** at 392-1111 (or 9-1-1 for emergencies), or [http://www.police.ufl.edu/](http://www.police.ufl.edu/).

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**Academic Resources**

<table>
<thead>
<tr>
<th>E-learning technical support</th>
<th>352-392-4357 (select option 2) or e-mail to <a href="mailto:Learningsupport@ufl.edu">Learningsupport@ufl.edu</a>. <a href="https://lss.at.ufl.edu/help.shtml">https://lss.at.ufl.edu/help.shtml</a>.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Library Support</td>
<td><a href="http://cms.uflib.ufl.edu/ask">http://cms.uflib.ufl.edu/ask</a>. Various ways to receive assistance with respect to using the libraries or finding resources.</td>
</tr>
<tr>
<td>Teaching Center</td>
<td>Broward Hall, 392-2010 or 392-6420. General study skills and tutoring. <a href="https://teachingcenter.ufl.edu/">https://teachingcenter.ufl.edu/</a>.</td>
</tr>
<tr>
<td>Writing Studio</td>
<td>302 Tigert Hall, 846-1138. Help brainstorming, formatting, and writing papers. <a href="https://writing.ufl.edu/writing-studio/">https://writing.ufl.edu/writing-studio/</a>.</td>
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