Spring 2021
PHY7097+PHY4905
Qualitative Methods of Theoretical Physics
(On-line Course)

All materials for this class will be posted at UF e-learning. Enter with your Gatorlink login and password.

Zoom Meeting Days & Times:
Monday, Wednesday, Friday
Period 3+ (3:00 p.m. - 3:50 p.m.)

Instructor: Dmitri Maslov, e-mail: maslov@phys.ufl.edu

Office hours: Via Zoom by appointment with an instructor
Objectives

The objective of this course is to provide students with hands-on skills in Qualitative Methods of Theoretical Physics. This edition of the course will focus on the following topics:

I. Dimensional analysis and scaling.
II. Approximate mathematical methods.
III. Analyticity and symmetry.

Coursework

Bi-weekly homework (70%). Term paper (30%). No exams.

Texts

No main text is assigned. Lectures notes will be provided.

Supplementary texts:


Grading Policy

The following is given as an example only.

<table>
<thead>
<tr>
<th>Percent</th>
<th>Grade</th>
<th>Grade Points</th>
</tr>
</thead>
<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>
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<tr>
<td>81.0 – 83.9</td>
<td>B</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 - 79.9</td>
<td>C+</td>
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<tr>
<td>72.0 – 74.9</td>
<td>C</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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<tr>
<td>63.0 - 65.9</td>
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<td>60.0 - 62.9</td>
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<td>0 - 59.9</td>
<td>E</td>
<td>0.00</td>
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</table>

More information on UF grading policy may be found at:

UF Graduate Catalog
Grades and Grading Policies

Students Requiring Accommodations
Students with disabilities who experience learning barriers and would like to request academic accommodations should connect with the Disability Resource Center. It is important for students to share their accommodation letter with their instructor and discuss their access needs, as early as possible in the semester.

**Course Evaluation**

Students are expected to provide feedback on the quality of instruction in this course by completing online evaluations. 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 on the Gator Evals page.

**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 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 or concerns, please consult with the instructor or TAs in this class.

**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 the Notification to Students of FERPA Rights.

Our class sessions may be audio visually recorded for students in the class to refer back and for enrolled students who are unable to attend live. Students who participate with their camera engaged or utilize a profile image are agreeing to have their video or image recorded. If you are unwilling to consent to have your profile or video image recorded, be sure to keep your camera off and do not use a profile image. Likewise, students who un-mute during class and participate orally are agreeing to have their voices recorded. If you are not willing to consent to have your voice recorded during class, you will need to keep your mute button activated and communicate exclusively using the “chat” feature, which allows students to type questions and comments live. The chat will not be recorded or shared. As in all courses, unauthorized recording and unauthorized sharing of recorded materials is prohibited.

**Campus Resources:**

**Health and Wellness**

<table>
<thead>
<tr>
<th>U Matter, We Care:</th>
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<tbody>
<tr>
<td>If you or a friend is in distress, please contact <a href="mailto:umatter@ufl.edu">umatter@ufl.edu</a> or 352 392-1575 so that a team member can reach out to the student.</td>
</tr>
</tbody>
</table>

| Counseling and Wellness Center: 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 police.ufl.edu.

Academic Resources

- **E-learning technical support**, 352-392-4357 (select option 2) or e-mail to Learning-support@ufl.edu.
- **Career Resource Center**, Reitz Union, 392-1601. Career assistance and counseling.
- **Library Support**, Various ways to receive assistance with respect to using the libraries or finding resources.
- **Teaching Center**, Broward Hall, 392-2010 or 392-6420. General study skills and tutoring.
- **Student Complaints Campus**
- **On-Line Students Complaints**