1. **COMPETENCY-BASED GOALS AND OUTCOME OBJECTIVES**

The first semester Molecular Cell Biology and Genetics course (MCBG) will help you to learn the fundamental molecular, cellular, and genetic processes common to all mammalian cells, with an emphasis on clinical relevance. The course will also involve you in three of Loyola’s educational projects: the Vertical Genetics Curriculum, the competency-based curriculum, and the outcomes approach to assessment. (Go to [http://www.stritch.luc.edu/lumen/goals.pdf](http://www.stritch.luc.edu/lumen/goals.pdf) to see the complete Loyola University Chicago SSOM Competency Goals and Outcomes.) MCBG specific goals and outcome objectives can be found through the course website or at [http://www.stritch.luc.edu/lumen/MedEd/cellbio/MCBG11/GoalsandObjectives.PDF](http://www.stritch.luc.edu/lumen/MedEd/cellbio/MCBG11/GoalsandObjectives.PDF).

In MCBG, you will be evaluated in four of the six competency goals. When you successfully achieve the specific MCBG objectives for competency in 1) **Medical Knowledge** and 2) **Lifelong Learning, Problem-solving and Personal Growth**, you will have the necessary skills and attitudes to build a personal framework for understanding the scientific basis of medicine. You will also be prepared to master key principles and concepts taught in subsequent medical school courses. When you achieve the specific MCBG objectives for competency in 3) **Interpersonal and Communication Skills** and 4) **Professionalism**, you will be prepared to work effectively with your peers in other medical school courses as well as in collaborative health care provider groups in a clinical setting. (See Section 10.)
2. OUTCOMES-BASED SELF-ASSESSMENT PLAN

To become a successful independent learner, it is important that you evaluate your current strengths and weaknesses and set goals for improving your knowledge and skills. This activity creates a learning cycle of Plan→Do→Assess.

We have provided forms at the end of this Introduction to assist you in this process. The first one is the Precourse Self-Assessment and Goal-Setting Form (Form 1). You should complete this form during orientation week and bring a copy to the first Small Group session for your faculty facilitator. In addition to self-assessment, this form will provide the faculty with information on your background knowledge, skills, and attitudes in the four core competencies related to the course. It will be used at your one-on-one meeting with your faculty facilitator(s) during Weeks 2-3.

You should reassess your goals at the end of Week 3 using the Midcourse Self Assessment Form (Form 2). You can discuss these goals or any issues related to Small Group with your facilitator(s) or with the course director, Dr. Simmons, at any time.

3. COURSE ORGANIZATION

The emphasis of the course will be on student-centered learning. The class will meet 3½-4½ hours daily, five days a week. You will be assigned daily readings from the textbooks or occasionally from a journal article. You will also be provided with a CD that contains lecture notes. These files have the reading assignment and a list of key concepts and learning objectives to guide you reading and studying, as well as important figures and explanations from the lecture. The learning objectives tell you what you need to know, and will be especially useful for testing yourself in preparation for the exam. You may find it useful to print these files and bring them to class for note taking. These files, as well as lecture slides and video recordings of the lectures, will also be posted to the course calendar on the LUMEN website.

Most class meetings will begin with a 2-hour Small Group Problem Solving Session (SGPSS). Your small group will be given a problem set related to the material from the previous day’s lecture. This session will provide you with the opportunity to integrate information and to apply your knowledge to analyze and solve problems. You will then assemble in the lecture hall (room 190) for a half-hour recap session, in which the faculty member who authored the problem set will go over the answers. The recap will be followed by a 60, 90, or 120 min. lecture on new material.

To maximize your learning during lectures and SGPSS, you should review the lecture notes and read related information from the textbook assignment prior to each class meeting. By reviewing the notes and reading the textbooks, you will be able to anticipate topics to be covered in lecture. Consequently, you can pay particular attention to difficult concepts and ask specific questions. In addition, it is your professional obligation to come to the small group sessions prepared so that you can contribute intelligently to the conversation, and to the problem-solving process. Preparedness will be considered when evaluating your competency in professionalism.

Weekly Question and Answer (Q&A) Sessions are scheduled on Friday afternoons. These informal sessions will give you the opportunity for individualized interactions with faculty who have lectured during the previous week (Fri.-Thurs.). You can also address questions to faculty and to other students
through the computer-based Moodle that can be accessed through the MCBG website (see Section 12). Finally, you will participate in an independent research/learning activity called the Medical Genetics Project (see Section 9). You will do literature research on a specific genetic disease and then gather with other members of your small group in a special session on Sept. 12 to share the information that you found. For those who would like to broaden their knowledge to include current research areas at Loyola, an optional lecture series called “Advanced Biochemistry for Fun” will be set up on certain Friday afternoons. In this series, faculty members will present a short lecture on their research.

The course topics are organized into modules: Protein Structure and Function (Aug. 6-9), Molecular Biology (Aug. 10-23), Medical Genetics (Aug. 24-29), and Cell Biology (Aug. 30-Sept. 20).

There will be three exams in the course, which will consist of USMLE-like multiple choice questions. Exam 1 (Aug. 20) will cover lectures through Thurs., Aug. 16. Exam 2 (Sept. 4) will cover lectures from Aug. 17 through Aug. 30. Exam 3 (Sept. 24) will cover lectures from Aug. 31 through Sept. 20. In addition, Exams 2 and 3 will contain some questions on earlier material in lieu of a comprehensive final exam. The Medical Genetics Project will also contribute to the final grade.

4. COURSE GRADING

The final course grade will be based on assessment of both the Medical Knowledge Competency and the Lifelong Learning Competency.

Exams will be cumulative in lieu of a comprehensive final. The maximum number of possible points will be approximately 211, and divided as follows:

| Exam 1: | ~6 one-point multiple choice questions for each lecture from Aug. 6-16: | ≈ 54 pts. |
| Exam 2: | a) ~6 one-point multiple choice questions for each lecture from Aug. 17-30; | |
| | b) A total of 6 one-point multiple choice questions for lectures from Aug. 6-16: | ≈ 60 pts |
| Exam 3: | a) ~6 one-point multiple choice questions for each lecture from Aug. 31-Sept. 20; | |
| | b) A total of 6 one-point multiple choice questions for lectures from Aug. 17-30: | ≈ 72 pts |
| Medical Genetics Project: | a) Student-led discussion and references | 25 pts |

Final grades will be determined from the percentage of the total points achieved:

- Honors: ≥ 92.0%
- High Pass: ≥ 84.0% and < 92.0%
- Pass: ≥ 69.5% and < 84.0%
- Fail: < 69.5%
Students who fail will be assigned a “Does Not Meet Expectations” for the Medical Knowledge Competency in the End-of-Course Competency Assessment Form (Form 5). Students who pass but score less than 75% can be assigned a “Meets Expectations with Concern.” (See Section 10.)

The evaluation of the Interpersonal and Communication Skills Competency and the Professional, Moral Reasoning, and Ethical Judgment Competency will also be entered into the End-of-Course Competency Assessment Form (Form 5) by the course directors in consultation with faculty facilitators as discussed in more detail in Section 10.

5. IMPORTANT DATES

Aug. 6: First day of class. Bring a copy of completed Form 1 to Small Group.
Aug. 7 or 9: Special lecture by the librarians on doing medical literature searches.
Aug. 10: Sign up for required individual meetings with Small Group facilitators.
Aug. 20: Exam 1
Aug. 24: Turn in the Genetics Project preliminary literature search to Small Group facilitators.
Aug. 27: Bring completed Form 2 to Small Group.
Sign up for optional individual meetings with Small Group facilitators.
Sept. 4: Exam 2
Sept. 10: Small Group Medical Genetics Project discussion session. Turn in references to facilitators.
Sept. 24: Exam 3

6. TEXTBOOKS AND LECTURE NOTES

Required:


A biochemistry textbook that is clinically oriented. Recommended options:


A medical genetics textbook. Recommended options:


The course lecture notes (on CD and LUMEN) for each day’s session consist of a list of Key Concepts and Learning Objectives as well as copies of most slides used in the lecture. The lecture notes also contain brief discussions of material inadequately covered in the text. However, you should take notes on the assigned readings and in lecture using the learning objectives as a guide. You will be expected to demonstrate understanding of all Key Concepts at the level indicated by the Learning Objectives. So testing yourself with the learning objectives is a good way to study for the exams. Note that the Learning Objectives can be covered in one or more of the following: reading assignment or lecture/class discussion or small group work.

At the end of the lecture notes, there is a list of references for Further Reading. These articles will help you to 1) broaden your knowledge, or 2) go into more depth on key topics covered in the lecture. Many of the references deal with the clinical relevance of these topics. These articles will not be sources for exam questions.

7. ATTENDANCE

You are expected to attend all lectures, small group sessions, and recap sessions. This is especially important since Learning Objectives (and exam questions) may be covered in ANY of these sessions. During small group sessions, students work collaboratively to assist each other in learning. Therefore, attending small group sessions is viewed as a professional obligation. Excused absences based on reasonable grounds are permitted, provided that the student informs their fellow group members and their facilitator in advance whenever possible. A pattern of unexcused absences will result in an unsatisfactory rating for Professionalism.

Make-up examinations will be given only in cases of excused absence as outlined in Part I of the Academic Policy Manual.

8. LEARNING IN SMALL GROUPS

You will spend the first two hours of each day working on problems in a small group of 4-5 students. Your group will meet in the assigned Learning Cluster room (see below) along with three other groups. There will be three faculty facilitators assigned to the room. Two facilitators will be in the room on any given day (see Section 16).

<table>
<thead>
<tr>
<th>Groups</th>
<th>Room</th>
</tr>
</thead>
<tbody>
<tr>
<td>1,2,3,4</td>
<td>340</td>
</tr>
<tr>
<td>5,6,7,8</td>
<td>350</td>
</tr>
<tr>
<td>9,10,11,12</td>
<td>370</td>
</tr>
<tr>
<td>13,14,15,16</td>
<td>380</td>
</tr>
<tr>
<td>17,18,19,20</td>
<td>440</td>
</tr>
<tr>
<td>21,22,23,24</td>
<td>450</td>
</tr>
<tr>
<td>25,26,27,28</td>
<td>470</td>
</tr>
<tr>
<td>29,30,31,32</td>
<td>480</td>
</tr>
</tbody>
</table>

You should report to your room at the scheduled time, assemble your group, and receive a problem set from the faculty facilitators. Consistent with the student-centered philosophy of this course, the facilitators will monitor the groups and assist them in the discussion process, but will not function as content experts. Facilitators will not lecture. They may answer questions at their discretion, but are normally asked to respond to a question with another question, or to direct students to raise the issue during the “recap session” that follows. A combination of good communication and problem-solving skills, a lively curiosity, and preparation (by reading through the handouts and related textbook material, and actively listening to lectures) will assure that one of the goals of small group sessions is met, namely that you achieve a deeper understanding of concepts by applying your knowledge in a novel context. A successful small group has members who have a combination of interpersonal skills including the ability to listen, to pose questions, and to communicate ideas effectively both orally and
in writing (e.g., at the flipchart). Importantly, they have respect for one another and the desire to include everyone in the discussion. Group members and facilitators will use the Small Group Assessment Forms (Forms 3 and 4) regularly to provide feedback to individuals and the group to assist in developing these skills and behaviors (Sections 17). Following the small group session, the class will reassemble in the lecture room for a "recap session" where faculty will discuss the problems and answer student questions.

At the end of the course, the course directors, in consultation with the faculty facilitators, will provide a summative evaluation of your competency in Interpersonal and Communication Skills and in Professionalism (Form 5, End-Of-Course Competency Assessment Assessment Form), based both on your performance in regular Small Group sessions and on the Medical Genetics Project (Section 9).

9. MEDICAL GENETICS PROJECT

Overview

The Medical Genetics Project is a small group exercise. You and your group will research information about a specific genetic disease and then teach your findings to your group mates and faculty facilitators in a special Small Group Genetics Project session on Sept. 12. This project has several goals. It will give you an opportunity to further develop your ability to search for, and critically evaluate, scientific evidence for the principles and concepts covered in the course. This goal is important since there is now a vast array of powerful technologies and databases that are specific for medicine and basic medical sciences. These resources require significant practice to locate and use. The project will also add to your knowledge about a specific genetic disorder, and illustrate important principles in human genetics, patient care, and societal issues. Finally, this project will give you the opportunity to practice teaching difficult medical concepts to your peers, and ultimately to patients.

The different assignments for the Genetics Projects are spread throughout the course. You have two responsibilities during the first week of class. First, your group needs to choose a genetic disease to study. You can use the recommended genetics textbooks for the course, or the websites for GeneReviews or Genes and Diseases for this purpose (see below). You should make sure that your group covers several of the following topics: disease etiology, pathogenesis, phenotype and natural history, management, inheritance risk, and family, social, legal, and ethical issues that relate to the specific disorder. While you can divide up the topics among group members, everyone should have a clear understanding of the disease etiology and mode of inheritance.

The second responsibility during the first week is to attend a special PCM1 lecture by the librarians. Based on your PCM1 small group assignments, you will be scheduled to attend this lecture either on Tues. Aug. 7 (1:30-2:30, Tobin Hall, 190) or Thurs. Aug. 9 (1:30-2:30, Leischner Hall, 390). The librarians will show you how to do a search of the National Library of Medicine “Medline” database using the Ovid or PubMed search engines.

You will then be asked to do a preliminary search for publications related to your chosen genetic disease and subtopic (see Literature Search Details below). You should turn in your search strategy containing the following information to your Small Group facilitators on Fri. Aug 24:

1. A cover sheet identifying the disease and specific aspect you are investigating.
2. The key concepts of your search.
3. Your Pubmed or Ovid search strategy.
4. Three to Five relevant references.
More details will be provided at the Aug. 7 and Aug. 9 lectures. The librarians will look over your search strategy and suggest improvements. Your strategy containing their comments will be given back to you on Aug. 31 via your facilitators.

You can then do a more refined publication search. Books and patient advocacy or NIH websites can also be used to obtain information as discussed below. Make sure that your sources are reliable, i.e., authored by experts and free of conflicts of interest. Come prepared to discuss your findings with your group members on the special Genetics Project session on Sept. 12. To enhance your teaching effort, you can bring along visual aids or come prepared to use the flipchart to explain concepts. In lieu of a formal bibliography, each person should identify their 3-4 most important references and then print out the first page of each article or do a screen print of a website. Put your name and group number at the top of each page. Gather the pages from your group mates, staple them together, and hand them in to the facilitators at the end of the Genetics Project session. These pages will provide the course directors with some evidence that you did an independent and appropriate literature research.

**Grading**

The genetics project will be worth 25 points toward your final course grade (12%). This will be based on your preparation for and participation in the Genetics Project session, as well as the appropriateness of your submitted references. Small Group facilitators will perform the evaluation. It is expected that all students will get the full 25 points. Facilitators can recommend a lower grade for students who are obviously not prepared or did not participate in the discussion.

Satisfactory completion of the Medical Genetics Project will also result in a “Meets Expectations” in the Lifelong Learning Competency in the End-of-Course Competency Assessment Form (Form 5).

**Literature Search Details**

Acceptable sources of information are textbooks, review articles, online resources (e.g., NIH, scholarly societies, patient advocacy groups, etc.), evidence-based medicine reviews, and original research articles. You can get help in finding reliable information from the LUMC Library Website link (http://library.luhs.org/hslibrary/index.htm) “Resources for Medical Students,” which contains catalogs, online textbooks, databases, etc. Use the tab “Training/Education” on the Library Website and click on “Guides and Tutorials” to get detailed instructions on 1) how to use databases, 2) how to conduct a literature search, and 3) how to evaluate the reliability of the information you find. You and your group can get personal help by contacting Jeanne Sadlik (Coordinator for References & Education Services, Health Science Library) (X6-5304; jsadlik@lumc.edu) or a member of her staff.

The following are some useful websites that specifically reference genetic diseases:

- [www.geneclinics.org](http://www.geneclinics.org): presents detailed scientific reviews of specific genetic disorders, as well as labs and clinics that test for and treat specific disorders by locality (state). Click on “GeneReviews,” “Browse GeneReviews,” “All Titles” for an alphabetical list of genetic diseases.
List of genetics sites:  http://library.luhs.org : “E-Resources,” “Resources by Subject,” “Genetics.”
PubMed, Medical Genetics Search: From the LUHS library webpage (http://library.luhs.org/) select PubMed under the heading “Quick Links”. From the PubMed page select “Clinical Queries” under the heading “PubMed Tools”. At the Clinical Queries page you can carry out a “Medical Genetics Search” at the top right of the page. Enter the disease in the search window and select a category such as “Diagnosis”, “Clinical Description”, “Management”, “Genetic Counseling”, etc. You can also search the same disease under the heading “Clinical Study Category” at the top left of the page. The search categories here are “Etiology”, “Diagnosis”, “Therapy”, “Prognosis”, etc. Finally, you can search for a systematic review of a genetic disorder under the heading “Find Systematic Reviews” in the top middle of the page. Each search produces a list of papers with the opportunity to view abstracts, if available. One can also click on an author’s name and retrieve a list of related publications by that author.

10. EXAMS AND EVALUATION FORMS: Assessment of Competency-based Goals and Objective.

Medical knowledge will be evaluated by USMLE-type multiple-choice questions. The testing procedures resemble those of the USMLE and have been adopted by all courses at the medical school. Examinations will be administered by computer. Students are not permitted to ask questions during exams. Students who are suspected of cheating at any time during an exam will be asked to leave the examination room and will receive a failure on that exam. Such matters will be handled in accordance with procedures established by the Medical School Council. The final course grade (Honors, High Pass, Pass, Fail) will be based on these exams of medical knowledge as well as on the Lifelong Learning component of the Medical Genetics Project as discussed above. Course failures will be treated in accordance with Part I of the Academic Policy Manual.

The evaluation of the four core competencies covered in this course will be reported on Form 5. The level of competency will be designated by “Meets Expectations”, “Meets Expectations with Concerns”, or “Does Not Meet Expectations”. Any grade of “Does Not Meet Expectations” or “Meets Expectations with Concerns” will be accompanied by a comment specifying what generated the concern and what needs improvement. These competency grades will be part of your record at Loyola, and will be reported to a Council of Competency Directors, which tracks the progress of individual students throughout all four years of the curriculum. A “Student Progress Committee,” in consultation with the appropriate course and competency directors, will assist students who fail to meet expectations in a particular competency to develop a remediation plan. Students who do not remediate a “Does Not Meet Expectations” or who have accumulated multiple “Meets with Concerns” in a given competency by the end of the year 2 can be prevented from proceeding to year 3. The evaluation of competency outcomes has become a feature of undergraduate and graduate (residency) medical education throughout the United States, and is not unique to MCBG or Loyola.

11. TUTORING, LEARNING ASSISTANCE, AND COMPUTER LAB

It is the faculty’s goal that all students successfully complete this course. In addition to the weekly Question and Answer sessions, the faculty will provide individual assistance to any student requesting it. Consult Sections 13-14 for faculty office locations, telephone numbers, and e-mail addresses. Current lecturing faculty will also maintain office hours in SSOM in room 242, with the schedule to be announced.

Learning assistance is available from Beth A. Sonntag, M.Ad.Ed., Director of the Teaching and Learning Center. Her office location and phone number are: Room 255, 216-5447. She can provide
help in such areas as test-taking skills, note-taking and study skills, managing stress, and managing time. Many of your classmates will take advantage of these resources, so you should not hesitate to seek assistance. Her office can also provide tutors for students who need additional help. All students are urged to consult the Teaching and Learning Center website, www.meddean.luc.edu/tlc, for a listing of services and scheduled workshops that are offered to students.

12. MOODLE

The student and faculty participants in this course have been placed into a computer Moodle group to facilitate online discussion of learning issues. Moodle is accessed through LUMEN (Loyola University Medical Education Network) at www.meddean.luc.edu/lumen/meded/cellbio/index.htm. Students may post questions at any time. Faculty will check this online discussion daily and will post responses the same or next day. In addition, faculty may post additional information, practice questions, short videos, animations, etc., that will enhance student understanding of lecture concepts. Student response to questions and faculty postings is encouraged and expected. We hope this discussion will bring the faculty and students together into an interactive learning community to enhance the quality of our collective understanding of the Key Concepts in this course. Moodle is preferred over direct e-mails to faculty since the questions and answers are available to all students. If your question is not being answered, it is appropriate to send an e-mail notice to the faculty member to check Moodle.

13. FACULTY: COURSE LECTURERS

Edward Campbell, Ph.D., Loyola Hospital North Entrance, room 5628, X6-3913, ecampbell@lumc.edu

Mitchell Denning, Ph.D., Cancer Ctr., room 304, X7-3358, mdennin@lumc.edu

Andrew Dingwall, Ph.D., Cancer Ctr., room 334, X7-3141, adingwall@lumc.edu

Kimberly Foreman, Ph.D., Cancer Ctr., room 235, X7-3320, kforema@lumc.edu

Allen Frankfater, Ph.D., ASST. COURSE DIRECTOR, SSOM, room 319, X6-1127, afrankf@lumc.edu

Caroline Le Poole, Ph.D., Cancer Ctr., room 203, X7-2032, ilepool@lumc.edu

Richard Schultz, Ph.D., Loyola Hospital North Entrance, room 6652, X6-9378, rschult@lumc.edu

William Simmons, COURSE DIRECTOR, Ph.D., Loyola Hospital North Entrance, room 2724C, X6-3362, wsimmon@lumc.edu

Nancy Zeleznik-Le, Ph.D., Cancer Ctr., room 337, X7-3368, nzelezn@lumc.edu
14. FACULTY: SMALL GROUP FACILITATORS

Mauruzio Bocchetta, Ph.D., Cancer Ctr., room 204, X7-3362, mbocche@lumc.edu

John Callaci, Ph.D., EMS Bldg., room 4249, X7-2461, jcallaci@lumc.edu

Edward Campbell, Ph.D., Loyola Hospital North Entrance, room 5628, X6-3345, ecampbell@lumc.edu

Mashkoor Choudhry, Ph.D., EMS Bldg, room 4236, X7-2463, mchoudhry@lumc.edu

Neil Clipstone, Ph.D., Loyola Hospital North Entrance, room 2720F, X6-6195, nclipstone@lumc.edu

Michael Collins, Ph.D., Loyola Hospital North Entrance, room 2276, X6-4560, mcollin@lumc.edu

Andrew Dingwall, Ph.D., Cancer Ctr., room 334, X7-3141, adingwall@lumc.edu

Kimberly Foreman, Ph.D., Cancer Ctr., room 235, X7-3320, kforema@lumc.edu

Allen Frankfater, Ph.D., SSOM, room 319, X6-1127, afrankf@lumc.edu

Thomas Gallagher, Ph.D., Maguire Bldg, room 3701, X6-4850, tgalag@lumc.edu

Saverio Gentile, Ph.D., Loyola Hospital North Entrance, room 3641, sagentile@lumc.edu

Jose Guevara, M.D., Ph.D., Cancer Ctr., room 3030, X7-3155, jaguevara@lumc.edu

Earle Holmes, Ph.D., LUH 203 McGaw Entrance, room 0121, X6-3292, echolmes@lumc.edu

Phong Le, Ph.D., Loyola Hospital North Entrance, room 5644, X6-3603, ple@lumc.edu

Caroline LePoole, Ph.D., Cancer Ctr., room 203, X7-2032, ilepool@lumc.edu

Matthias Majetschak, M.D., Ph.D., EMS Bldg., room 4237, X7-2472, mmajetschak@lumc.edu

John McNulty, Ph.D., Loyola Hospital North Entrance, room 0617, X6-5161, jmcnulty@lumc.edu

Gregory Mignery, Ph.D., Loyola Hospital North Entrance, room 5603, X6-1181, gmigne@lumc.edu

Clodia Osipo, Ph.D., Cancer Ctr., room 238, 7-2372, cosipo@lumc.edu

Margaret Prechel, Ph.D., EMS Bldg., room 5225, X7-2754, mpreche@lumc.edu

Katherine Radek, Ph.D., EMS Bldg., room 4219, X7-2360, kradek1@lumc.edu

Richard Schultz, Ph.D., Loyola Hospital North Entrance, room 5658, X6-3360, rschult@lumc.edu

Ravi Shankar, Ph.D., EMS Bldg., room 4238, X702475, rshanka@lumc.edu

William Simmons, Ph.D., Loyola Hospital North Entrance, room 2724, X6-3362, wsimmon@lumc.edu
Karen Visick, Ph.D., Maguire Center, room 3860A, X6-0869, kvisick@lumc.edu

Pamela Witte, Ph.D., Loyola Hospital North Entrance, room 5679, X6-3358, p witte@lumc.edu

15. COURSE STAFF

Maureen Locklund, Course Coordinator, SSOM, room 320, X6-7989, mlocklund@lumc.edu

16. SMALL GROUP PROBLEM-SOLVING SESSIONS: ROOMS AND FACILITATORS

**Room 340** – William Simmons, Ph.D.; Phong Le, Ph.D.; John McNulty, Ph.D.
   Groups 1, 2, 3, 4

**Room 350** – Allen Frankfater, Ph.D.; Katherine Radek, Ph.D.; Edward Campbell, Ph.D.
   Groups 5, 6, 7, 8

**Room 370** – Margaret Prechel, Ph.D.; Earle Holmes, Ph.D.; Pamela Witte, Ph.D.
   Groups 9, 10, 11, 12

**Room 380** – Richard Schultz, Ph.D.; Andrew Dingwall, Ph.D.; Mashkoor Choudhry, Ph.D.
   Groups 13, 14, 15, 16,

**Room 440** – Karen Visick, Ph.D.; Saverio Gentile, Ph.D.; Neil Clipstone, Ph.D.
   Groups 17, 18, 19, 20

**Room 450** – Maurizio Bocchetta, Ph.D.; Michael Collins, Ph.D.; Thomas Gallagher, Ph.D.
   Groups 21, 22, 23, 24

**Room 470** – Clodia Osipo, Ph.D.; Matthias Majetschak, M.D., Ph.D.; Ravi Shankar, Ph.D.
   Groups 25, 26, 27, 28

**Room 480** – Caroline Le Poole, Ph.D.; Jose Guevara, M.D., Ph.D.; Gregory Mignery, Ph.D.
   Groups 29, 30, 31, 32,
17. SUMMARY OF ASSESSMENT FORMS (which follow this Course Description, or are available online in LUMEN)

**Form 1: Precourse Self-assessment and Goal Setting:** to be completed by each student and turned in to the faculty facilitator at the orientation Small Group Problem Solving Session on Aug. 6. This form will be discussed at the one-on-one meeting with your facilitators during weeks 2-3.

**Form 2: Midcourse Self-assessment:** to be completed by each student and turned in to the faculty facilitators by the end of week 3 (Aug. 27). This form may be discussed at your optional one-on-one meetings with your facilitators during week 4-5.

**Form 3: Small Group Assessment, Student Version:**

**Form 4: Small Group Assessment, Facilitator Version:**

There are two Small Group Assessment Forms, a student version and a facilitator version. Both forms assess interpersonal and communication skills, and professionalism. The student version describes the specific behaviors that individual members of a successful small group are likely to display. Individual students will use this form to self-assess, and to assess their groups and their peers. The facilitator version Part 4A will be used to identify specific problems that interfere with good group dynamics. It is expected that these problems will disappear as the course progresses. Facilitators will use Part 4B to communicate to the course directors that students have met expectations for the core-competencies of 1) interpersonal and communication skills, and 2) professionalism.

Facilitators will meet individually with each student from their small groups during Week 2-3 and, optionally, during Weeks 4-5 of the course to give personal formative feedback.

**Form 5: End-Of-Course Competency Assessment:** to be completed by the course directors with input from facilitators and staff members. The form reports an overall summative assessment of outcomes in the four core competency areas evaluated in this course. Data to be used include examinations, observations during SGPSS, and performance on the Genetics Project. Students are encouraged (but not required) to use the forms to self-assess.