

IPM Assessment Plan

Graduate programs overseen by the College of Graduate Studies, including the Integrated Pharmaceutical Medicine Program (IPM), are subject to an annual review that provides for continuous quality improvement. The annual process includes an assessment schedule, reporting requirements, and documentation of assessment work, which is assembled in an annual report for review by the college's Graduate Faculty Council (see Use of Assessment Data section below for further details). In addition, a comprehensive program review occurs every seven years. These assessments are designed to ensure that graduate programs are fulfilling their obligations to students and external accrediting agencies.

All academic programs in the College of Graduate Studies are required to have the following key components: mission statement; program goals and objectives; course objectives; an appropriate variety of methods of assessment; designated timeframes for data collection and analysis; and a plan for the use of assessment data for course and program improvement. These components are detailed below for the IPM program.

IPM Mission Statement

The mission of the Integrated Pharmaceutical Medicine Program is to advance the quality of healthcare and treatment of illness through the development of leading biomedical research scientists and scholars by providing students with an environment and opportunity to train with world-class faculty researchers in preparation for careers in academia or industry.

Program Vision

The provide students with an excellent integrated pharmaceutical medicine graduate education, imbuing them with advanced skills and the necessary qualifications to succeed as a researcher in academia, biotechnology, or industry, while benefiting from NEOMED's excellent research environment and infrastructure.

IPM Program Goals and Objectives

1. Comprehensive knowledge of research science with expertise in one of NEOMED six research tracks:
 - A. **Pharmaceutical Sciences**: A thorough knowledge of the pharmaceutical sciences with research emphasis in a chosen area of expertise or specializations such as drug design and discovery, pharmaceuticals (dosage form development, drug delivery and drug formulation), pharmacologic and toxicologic evaluation of drugs, disease mechanisms, and development/use of disease models for research.



- B. Metabolic Disease: A thorough knowledge of metabolic-related disease, necessary to engage in hypothesis-driven research into the mechanisms of metabolic disease, diabetes, or obesity.
 - C. Cardiovascular Disease: A thorough knowledge of cardiovascular disease, necessary to undertake hypothesis-driven research into the mechanisms of heart disease, hypertension, stroke, and heart failure.
 - D. Skeletal Disease: A thorough knowledge of bone and tissue regrowth, necessary to undertake hypothesis-driven research into the mechanisms of debilitating conditions such as arthritis, cancer, osteoporosis and bone fractures.
 - E. Neurodegenerative Disease: A thorough knowledge of degenerative diseases of the central nervous system, necessary to undertake hypothesis-driven research into the mechanisms of Parkinson's disease, Alzheimer's disease, glaucoma, and other neuropathies.
 - F. Auditory Neuroscience: A thorough knowledge of sensory processing, necessary to undertake hypothesis-driven research to elucidate neural circuits that contribute to auditory processing, and to understand how disorders such as hearing loss, tinnitus, or emotional dysregulation affect the auditory system and perception of speech and the world around us.
2. Training consistent with students' career goals. This includes a focus on disease mechanisms and targets for therapeutic intervention.
 3. A thorough knowledge of planning, organizing, and conducting independent research following the norms and standards of national research organizations, societies, government, and industry.
 4. An ability to effectively communicate research findings to internal and external audiences, in oral and written form.
 5. A thorough knowledge of methods to secure support and independent funding from government and private sources to conduct independent research.
 6. A desire to remain immersed in the philosophy of life-long learning, and an appreciation of the importance to maintain and continually update their knowledge base.



IPM Program Pathways

Ph.D. Degree in Integrated Pharmaceutical Medicine

The Ph.D. degree in integrated pharmaceutical medicine at NEOMED requires a total of 90 credit hours. All doctoral students in the program will be required to complete 30 hours of didactic, 30 hours of research and 30 hours of dissertation work, culminating in a written dissertation and dissertation defense.

All doctoral students will be administered a qualifying/candidacy exam upon completion of the course work, including the core curriculum requirements. This examination will be taken within one year of completion of the core requirements and usually no later than the summer after the student's second year. Doctoral students "advance to candidacy" after successful completion of the candidacy exam and begin preparation of the Prospectus or dissertation plan. The Prospectus is a written dissertation plan that is orally defended in front of the student's committee. The work resulting from the Prospectus becomes the dissertation that is also a written document orally defended in front of the student's committee.

M.S. Degree in Integrated Pharmaceutical Medicine

The M.S. degree in integrated pharmaceutical medicine at NEOMED requires a total of 45 credit hours, including 23 credit hours of core curriculum, 13 credit hours of research, and 9 hours of thesis research, culminating in a written thesis and thesis defense.

IPM Course Objectives

Course objectives have been developed for IPM courses. The course objectives have been aligned with the program objectives as well as the College of Medicine's educational objectives.

Research Courses:

65101 Research Methods

| Course Learning Objectives | IPM |
|--|------------|
| 1. Describe the overall research process, as it pertains to your health-based field. | 1, 3, 5 |
| 2. Beginning with an observation, develop a testable research question. | 3, 4 |
| 3. Describe the design of various types of observational trials (cohort, cross-sectional, and case control). | 3, 4 |
| 4. Describe the design of prospective interventional and quasi-experimental trials. | 3 |
| 5. Identify strengths and weaknesses of various trial designs, especially as it relates to | 2, 3, 6 |



| | |
|---|------|
| your health- based field. | |
| 6. Identify and develop a research idea into a study protocol. | 3 |
| 7. Explain basic biostatistics principles that must be considered when designing and evaluating research. | 3, 4 |
| 8. Identify appropriate statistical tests for summarizing data based on the type of data being presented. | 3 |
| 9. Describe key elements of study implementation and data management. | 3 |
| 10. Address important ethical considerations when conducting health-based research. | 3 |
| 11. Explain various methods of dissemination research results. | 3, 4 |
| 12. Explain the value of critical thinking in relation to the research process. | 3, 4 |
| 13. Illustrate best practices for choosing a model system. (<i>Ph.D. Level</i>) | 3 |

65098 Research, 65199 Thesis Research and 80199 Dissertation Research

| Course Learning Objectives | IPM |
|---|------|
| 1. Achieve experimental design and execution | 3 |
| 2. Summarize, evaluate, and present research findings | 4 |
| 3. Develop and enhance professional, ethical approach to experimental design and execution. | 3, 6 |

65406 Introduction to Pharmaceutical Sciences

| Course Learning Objectives | IPM |
|--|-------|
| 1. Describe the various interdisciplinary areas of pharmaceutical sciences | 1A |
| 2. Describe drug action from the perspective of the drug as a chemical molecule | 1A, 2 |
| 3. Understand the drug structure/function relationship. | 1A, 2 |
| 4. Explain the role of enzymes and transporters involved in drug metabolism and clearance. | 1A, 2 |
| 5. Demonstrate a working knowledge of drug transport, absorption, distribution, metabolism, and disposition. | 1A, 2 |
| 6. Understand the concepts of pharmacodynamics and pharmacokinetics | 1A, 2 |
| 7. Understand the concepts of signal transduction and electrical signaling | 1A, 2 |
| 8. Understand the basic principles of drug action. | 1A, 2 |

60407 Molecular Pharmacology

| Course Learning Objectives | IPM |
|---|--------|
| 1. Recognize the major classes of drugs related to Neuropharmacology, Endocrine and Cardiovascular Pharmacology. | 1A, 1C |
| 2. Understand the pathophysiological basis and mechanism of action (both at the molecular and cellular levels) of different drugs/classes related to Neuropharmacology, | 1A, 2 |



| | |
|---|-----------|
| Endocrine and Cardiovascular Pharmacology. | |
| 3. Recognize and understand the pharmacokinetics of different drug classes representing Neuropharmacology, Endocrine and Cardiovascular Pharmacology. | 1A, 1C, 2 |
| 4. Identify and understand the therapeutic use of selected drugs pertaining to Neuropharmacology, Endocrine and Cardiovascular Pharmacology. | 1A, 2 |
| 5. Recognize and understand key adverse effects, toxicity and drug interactions associated with each of the above drug classes. | 1A |

60408 Statistical Methodology in the Biomedical Sciences

| Course Learning Objectives | IPM |
|---|------|
| 1. Describe the four fundamental activities that statistics comprises | 3, 6 |
| 2. Explain the value of statistics in the biomedical research process. | 3, 6 |
| 3. Explain basic biostatistics principles that must be considered when designing and evaluating research. | 3, 6 |
| 4. Carry out the basic inferential tasks of point estimation, interval estimation and hypothesis testing for various types of biomedical data | 3, 6 |

65301 Responsible Conduct of Research

| Course Learning Objectives | IPM |
|--|------|
| 1. Describe best practices and responsible conduct in human and non-human subjects research | 3 |
| 2. Describe best practices in mentorship, authorship, and management of research protocols | 3 |
| 3. To apply ethical principles to the conduct of research | 3 |
| 4. To analyze cases using philosophical arguments and counterarguments, resolving ethical dilemmas in healthcare policies and practices. | 3, 4 |

65400 Patient Care

| Course Learning Objectives | IPM |
|---|------|
| 1. To provide patient-centered care that is compassionate, appropriate, and effective for the treatment of health problems and the promotion of health | 2 |
| 2. To demonstrate interpersonal and communication skills that result in the effective exchange of information and collaboration with patients, their families and health professionals | 2, 4 |
| 3. To demonstrate a commitment to carrying out professional responsibilities and adherence to ethical principles | 2, 6 |
| 4. To demonstrate application of established knowledge from M1, M2 year and PhD work to established and evolving biomedical, clinical, epidemiological and social-behavioral sciences, as well as the application of this knowledge to patient care | 2, 6 |
| 5. To demonstrate the qualities required to sustain lifelong personal and professional growth | 2, 6 |



| | |
|--|------|
| 6. To demonstrate the ability to engage in an interprofessional team in a manner that optimizes safe, effective patient and population- centered care | 2 |
| 7. To demonstrate the ability to investigate and evaluate care of patients, to appraise and assimilate scientific evidence, and to improve patient care continuously based on constant self-evaluation and lifelong learning | 2, 3 |

60401 Drug Discovery, Development and Approval

| Course Learning Objectives | IPM |
|--|-------------|
| 1. Describe the general processes and strategies involved in drug discovery | 1A, 3 |
| 2. Explain how primary research literature is sourced and utilized in the discovery and design process. | 1A, 2, 3 |
| 3. Described the primary considerations and processes relating to drug/device development. | 1A, 3, 5 |
| 4. Explain the goals and process of preclinical testing. | 1A, 3 |
| 5. Provide overview and insight into potential interdisciplinary and institutional relationships (industry v. academia) implemented during the discovery, development, and testing stages. | 1A, 3 |
| 6. Explain the goals, considerations, and process of clinical trial design and execution. | 1A, 3 |
| 7. Describe the role of and activities of various regulatory agencies (i.e. FDA). | 1A, 3, 4, 5 |
| 8. Explain the criteria and process of drug approval by regulatory agencies | 1A, 3, 4 |
| 9. Explain how regulatory agencies approach drug regulation. | 1A, 3, 4 |
| 10. Interpret, critically assess, and support whether a drug has met necessary standards for approval. | 1A, 3 |

60402 Pharmaceutical Medical Seminar

| Course Learning Objectives | IPM |
|---|----------|
| 1. Assess, interpret, and critique a primary literature article | 1A, 2, 6 |
| 2. Effectively present research findings to a scientific audience | 1A, 4, 6 |
| 3. Discuss the merits of chosen primary research literature | 1A, 3, 6 |

Assessment Methods

The College of Graduate Studies encourages the use of a variety of assessment methods to support student learning, demonstrate faculty, course, and program effectiveness, and identify areas/elements for improvement. Direct and indirect assessment methods include summative and formative feedback to students, faculty, and program directors. The following table illustrates the recurring assessment cycles that provide important data and feedback to courses and programs.



| Assessment Schedule | Assessment Methods | Assessment Type | Conducts Assessment | Evaluates/Analyzes Assessment Data |
|-----------------------------|---|------------------------|----------------------------|---|
| Throughout Semester | <ul style="list-style-type: none"> • Assignments • Discussions • Exams | Direct | Course | Program |
| End of each course offering | Course Evaluations | Indirect | Institutional Research | Program |
| End of each course offering | Instructor Evaluations | Indirect | Institutional Research | Program |
| Annually | End of the Year Survey | Indirect | Institutional Research | College |
| Annually | Student Satisfaction Survey | Indirect | Institutional Research | College |
| At completion of program | Graduation Survey | Indirect | Institutional Research | College |
| Every seven (7) years | Program Review | Indirect | Institutional research | College |



Use of Assessment Data

The College identifies who will receive the analyzed indirect assessment data, and how it will be used by the program. For example, data can be shared with the program's advisory committee to inform curricular changes and development, and/or the instructional faculty for course feedback. Program changes and improvements should be recommended as needed in response to the analysis of assessment data. Such activities are documented and reported in an annual report as requested by the College of Graduate Studies Graduate Faculty Council each June.

In the above-referenced context we offer specific materials for review for the IPM program. Please note that some of this work is still in process.

Examples of Assessment Tools

Two assessment tools are included as attachments (below) as examples of the direct assessment activities that students in the IPM program will be asked to undertake.

- IPM Assignments
 - Assignment: Target Selection
 - Assignment: Writing Assignment



Additional Assessment Activities

Additional documentation that provides detailed information on indirect assessments are included as attachments (below). This information includes course and instructor evaluations, a student satisfaction survey, end of year survey, graduate exit survey, and materials detailing the seven-year graduate program review process.

➤ Assessment Tools

- [Survey Graduate Course Evaluation](#)
- [Survey Graduate Instructor Evaluation](#)
- [Survey Graduate Student Satisfaction Survey](#)
- [Survey End of Year Survey](#)
- [Survey Graduate Exit Survey](#)
- [Program Review Process](#)
 - [Graduate Program Review – Self-Study](#)



Assignment: Target Selection

Point value: 45 points

Instructions

Utilizing primary literature, find an interesting target that could be used to jump start a drug discovery program. This target could be from the literature, or from your own research. Use figures where appropriate.

1. Disease state a. What is the disease state the target will be used to treat?
2. Pharmacology a. What is the molecular target for this new program?
b. What is the connection between the biochemical pathway and the phenotypical change that is to be expected from manipulation of the target?
3. Pipeline compounds a. Are there any new pipeline compounds targeting this new biochemical target in the literature?

Grading Criteria

Your assignment is worth 45 points, and will be graded on the quality of the following components:

1. Accurately responding to each of the project objectives listed above.
2. While you are allowed to use images off websites in your document, please cite the source where you found them, and use your own words to describe the information on your strain.
3. Your submission should be 1-2 pages in length.

Submission Information

4. Upload your assignment as either an MS Word docx or pdf. Name the file as: **Last_name_Target**



IPM Fall 2021: Writing Assignment (30%)

ASSIGNMENT DUE ON 30 NOVEMBER 2021

Review the following aspects and properties for one of the listed drugs:

1. History, background, and development
2. Physical properties
3. Chemical properties
4. Pharmacological properties
5. Mechanism of action (MOA)
6. Molecular targets
7. Adverse effects
8. Toxicity
9. Pharmacokinetics
10. Absorption, Distribution, Metabolism, Elimination (ADME)
11. Therapeutic uses
12. FDA approvals and off-label uses
13. Therapeutic doses
14. Dosage forms
15. Similar drugs
16. Reflection
17. References

(As the course progresses, critically think how the lectures relate to your chosen drug!)



Instructions for References

1. A web-based document is unacceptable for the references. Only peer-reviewed literature or information from the patient package insert or information for health professionals provided by the manufacturer will be accepted.
2. **READ** the primary references. You must read the articles completely and not just use the abstracts, because you will need to critically evaluate the data. Review articles will be valuable in this subject area, but the most current information will be in the primary references. (Most reviews are at least one or two years behind the current literature).
3. Do an extensive computer (references) search on the various aspects of the drug. It is the fastest and easiest way to get references on your topic. You may be able to find a general review article. Some of the pharmacokinetic and metabolism may be in the patient package insert or information for prescribers. You can use either SciFinder or PubMed at <http://www.ncbi.nlm.nih.gov/PubMed/>, which allows you to retrieve related articles or access it through the Biomedical Library Web site. Conducting your initial search from 2000 to the present is a good way to start. PubMed has a very useful feature that will allow you to select "Related Articles" that can expand your search (both forward and backward in time). Many articles are now retrievable electronically, but you may have to go to the NEOMED library for other articles.
4. The website, www.clinicaltrials.gov can be useful to find information about ongoing Phase I, II, and III clinical trials.
5. Use the titled format for references that are used by PubMed. In the upper-right, there is a drop-down menu bar for each reference. Choose the summary (text) option and you will get a titled citation that can be copied and pasted into your reference list.
6. Malinowski JM. Atorvastatin: a hydroxymethylglutaryl-coenzyme A reductase inhibitor. *Am J Health Syst Pharm.* 1998 Nov 1;55(21):2253-67; quiz 2302-3. Review. PubMed PMID: 9825877.
7. If there are six or fewer authors, list all of them. If there are more than seven authors, you may list the names of the first six authors followed by et al. but in general, it is easier to list everyone since the last author is typically the corresponding author.
8. **Plagiarism will not be tolerated.** Examples of plagiarism include copying sentences or sections "word-for-word" from a paper or website without the use of quotations, lack of an accompanying citation (reference number) for a stated fact, use of a previous student's paper on the same topic, and placing reference numbers only at the end of paragraphs or at the end of the paper.



List of Drugs

Drugs selected by Dr. Kasumov

Histone deacetylase (HDAC) inhibitors

1. Belinostat (Beleodaq)
2. Panobinostat (Farydak)
3. Romidepsin (Istodax)
4. Vorinostat (Zolinza)

Lipid-lowering medications

1. Atorvastatin (Lipitor)
2. Simvastatin (Zocor)
3. Rosuvastatin (Crestor)
4. Pitavastatin (Livalo)
5. Pravastatin (Pravachol)
6. Lovastatin (Altoprev, Mevacor)

Drugs selected by Dr. Shin

Antibacterial Agents

1. Imipenem + Cilastatin + Relebactam (Recarbrio)
2. Ceftazidime + Avibactam (Avycaz)
3. Meropenem + Vaborbactam (Vabomere)

Anti-Alzheimer's disease drug

1. Aducanumab (Aduhelm)



Drugs selected by Dr. Darvesh***Antidepressants***

1. Brexanolone (Zulresso)
2. Esketamine (Spravato)
3. Vortioxetine (Trintellix)

Antipsychotic

1. Lumateperone (Caplyta)
2. Pimavanserin (Nuplazid)

Vesicular monoamine transporter 2 (VMAT2) inhibitor

1. Valbenazine (Ingrezza)

Anticonvulsants

1. Perampanel (Fycompa)
2. Cenobamate (Xcopri)

Antiviral medications

1. Remdesivir (Veklury)
2. Valacyclovir (Valtrex)

Instructions

1. You will be assigned an advisor based on the drug class you choose.
2. You will finalize the drug in consultation with your advisor.
3. Upload your assignment in Word or pdf format on course COGS Canvas site.
4. File name: **Last Name_IPS Writing Assignment 2021**



Course Evaluation

Strongly Agree (**SA**) - Agree (**A**) - Disagree (**D**) - Strongly Disagree (**SD**) - Not Applicable (N/A)

Course Content:

1. The course was well organized.
2. Learning objectives were clearly stated for all lectures and activities.
3. Graded content was based on the stated learning objectives.
4. The material in the course was presented at a level appropriate to my stage of training.

Comments about the course content:

Content Delivery:

5. The lectures, readings, or other course content was appropriate for optimal learning.
6. The amount of reinforcement of previous concepts was appropriate for optimal learning.
7. Knowledge gained in the course was reinforced by examples, assignments, projects.
8. If applicable, the laboratory/small group sessions were useful/helpful.
9. If applicable, the On-line discussions were useful/helpful.
10. The content in this course will be useful in future applications.

Comments about the content delivery:

Supplemental course materials:

11. The syllabus provided clear expectations.
12. The text and/or other assigned readings was useful.
13. Materials provided on AIMS/Blackboard/Springboard were useful.
14. Materials on AIMS/Blackboard/Springboard were easy to access.

Comments about course materials:

Overall rating

15. Overall this course met the objectives stated in the syllabus.

Comments about the course overall:

What were the most useful aspects of this course?

Any additional comments:



Instructor Evaluation

Strongly Agree (**SA**) Agree (**A**) Disagree (**D**) Strongly Disagree (**SD**)

The instructor:

1. Stated the course objectives.
2. Demonstrated knowledge of the topic.
3. Presented concepts in a clear and organized manner.
4. Discussed material at a level that was appropriate to my stage of training.
5. Made effective use of time.
6. Emphasized key points.
7. Spoke clearly.
8. Worked to engage the learners.
9. Summarized the course modules effectively.
10. The course instructor was present throughout the course by providing timely feedback, grading assignments, participating in discussions, etc.
11. Demonstrated respect for learners.
12. Displayed a positive attitude about teaching the material.
13. Was accessible for questions.
14. Overall, the teaching was effective.

Comments:

What did the instructor do that was most effective?

What could the instructor do to improve his/her teaching?

Other observations/recommendations:



Student Satisfaction Survey

1. What COGS Degree Program are you currently enrolled in?
2. Year in Program? 1 - 6
3. Upon reflection of this academic year, I think that, overall, the curriculum was well organized.
4. There was an integration of basic science concepts and clinical concepts in the curriculum.
5. I was provided with an adequate number of active learning experiences (e.g., small group discussions, interviewing).
6. The curriculum provided adequate opportunity for independent learning.
7. There was an adequate use of technology (e.g., Learning Management System, web-based lab activities) throughout the year.
8. The use of technology enhanced the quality of my learning experience.
9. I received timely feedback on my academic progress during the year.
10. There was a variety of assessment strategies during the year, e.g., written tests, lab practicals, presentations, feedback on essays, etc.
11. The number of assessments throughout the year was adequate.
12. In general, the assessments that determined my final grades reflected the learning objectives of the courses.
13. The curriculum fosters intellectual dialogue between students and faculty.
14. The curriculum helped me enhance my communication skills.
15. The curriculum helped me better understand the meaning of professionalism with regard to my future career.
16. The presence of medical and pharmacy students enhanced the interprofessional classes.
17. The curriculum during this academic year gave me a good start to my professional future.
18. I feel that NEOMED has provided an environment conducive to learning.



End of the Year Survey

The purpose of the following questions is to get feedback about your level of satisfaction with your educational experience to date. Your responses will be kept strictly confidential.

Please respond to the following questions with **the curriculum as a whole** in mind, not just an individual course.

Strongly Agree (SA) Agree (A) Disagree (D) Strongly Disagree (SD) Unable to Evaluate (U)

Curriculum Competencies - This academic year's curriculum...

1. This year's curriculum provided me adequate opportunities to enhance my **communication skills**.
2. This year's curriculum provided adequate **opportunity** to work on my own learning goals.
3. This year's curriculum **integrated** basic science concepts and helped me to apply them to less familiar clinical problems and concepts.
4. This year's curriculum fostered **intellectual dialogue** between students and faculty.
5. I felt the background **knowledge and skills** that I had at the start of the year prepared me to do well in this year's curriculum.
6. I felt that this year's learning **expectations** were adequately defined.
7. I feel confident that this year's curriculum adequately **prepared** me for next year's tasks.
8. I feel confident that the curriculum gave me a good **foundation** for my future as a health care professional.
9. I was given an adequate number of **active learning experiences** (e.g., small group discussions, labs, CSAs, online experiences).
10. I received adequate and timely **feedback** on my academic progress (including non-graded feedback like performance comments or practice questions).
11. There was an adequate variety of **graded assessment strategies** (e.g., written tests, lab practicals, presentations, feedback on essays).
12. In general, the assessment **outcomes** provided a fair representation of my efforts and achievement.
13. The overall amount of curricular **work** I was expected to do this year was appropriate.

When do you feel most engaged in classroom activities?



Comments about curriculum competencies?

Opportunities to address missions outside of curriculum - *NEOMED provided me an opportunity to...*

1. Participate in a scholarly or **research project**.
2. Participate in a **community** health-related activity (project, volunteer, etc.).
3. Be involved in extracurricular **primary care** oriented activities.
4. Volunteer in or interact with **underserved** populations.

Comments about extracurricular learning opportunities:

Learning Environment-

1. My **student peers** are supportive of my professional goals.
2. I am not subjected to offensive remarks by NEOMED **students**.
3. In general, the **faculty** I encounter are supportive of my professional goals.
4. I am not subjected to offensive remarks by NEOMED **faculty or staff**.
5. NEOMED **faculty** respond to student concerns effectively.
6. The **dean's office** responds to student concerns effectively.
7. NEOMED **University offices** (e.g. the President's office, Registrar, Library, etc.) respond to student concerns effectively.
8. NEOMED Educational Facilities in **Rootstown** were adequate to support my learning needs this year
9. NEOMED **Affiliated Clinical Sites** had adequate facilities to support my learning needs this year
10. I know the procedures for reporting mistreatment of medical students.

What is the best part of the learning environment?

Other comments about the learning environment:

Overall

1. I feel that NEOMED has provided an environment conducive to learning.

General comments:

Thank you for your help. Your feedback is essential.



Graduate Exit Survey

1. What COGS Degree Program are you currently enrolled in?
2. Year in Program? 1 - 6
3. What course did you find to be the most beneficial? Why
4. What course did you find to be the least beneficial? Why
5. What part of your lab experience did you find the Most enjoyable? Why?
6. What part of your lab experience did you find the Least enjoyable? Why?
7. What knowledge, skill or ability that you have developed since the beginning of the program do you think has been or will be the most valuable for you?
8. How would you rate the advising you received in the program?
9. Were programmatic expectations clear?
10. How would you improve the Graduate program?
11. How would you improve the NEOMED College of Graduate Studies student experience?
12. What advice do you have for incoming students?
13. What are your short and long term career goals?
14. Have they changed since you began this program?
15. Do you feel the degree earned in the program has properly equipped you for your chosen career?



Graduate Program Review Process

Purpose of Review

The purpose of the review is to evaluate the performance of graduate degree programs in the College of Graduate Studies in the context of the mission, goals and standards of the College.

Programs are to be reviewed every seven years. The Dean of Graduate Studies, in consultation with the Graduate Faculty Council will develop the schedule of reviews.

The review will include an assessment of the degree to which the program is meeting its mission and goals, its curriculum, capacity and resources.

An appointed review committee will gather data in order to understand, assess, and make recommendations to the Dean of Graduate Studies about the program under review.

Review Process

In July, the Office of the Dean, College of Graduate Studies notifies the appropriate program director that their program is to be reviewed.

The review process begins with a self-study conducted by the program faculty resulting in a Self-Study Report.

The review committee will consist of three to five members; at least one of them must be an external reviewer. Names of potential external reviewers are submitted by the program director to the Dean of Graduate Studies by September 1. The external reviewers should be experts in the discipline being reviewed, senior in rank, have experience in administration, and should have no professional or personal conflict of interest with the program under review or members of its faculty. The review committee will be selected by Graduate Faculty Council and recommended for appointment to the Dean.

The Self-study Report will be prepared by the program director. If an academic program is accredited by an outside body, the most recent accreditation report may be submitted along with, but not in lieu of, the self-study report. The self-study report is submitted electronically to the Dean by January 15. The self-study report will be provided to the review committee and the Office of the President. The format and content of the Self-study Report for the College of Graduate Studies can be found in the COGS Program Review Self-Study Report Form.

Reviewers will be provided with the Self-study Report. The review committee will then proceed to



schedule interviews with key stakeholders including the dean(s) of the college(s) housing the coursework and appropriate chairperson(s). It is further suggested that the review team meet with current and former students and individuals playing a key support role for the program. The Office of the Dean will provide administrative support to the Review Committee. The **Review Committee Report** is due to the Dean by April 1. The Review Committee Report is provided to the Dean of Graduate Studies, Office of the President, and the program director.

The program director has the option to prepare a document in response to the Review Committee Report. The purpose of the response document is to correct factual errors or errors of interpretation. The response document is due to the Dean of Graduate Studies within two weeks of receipt of the Review Committee Report. This response document will be also provided to the Office of the President.

The program director, after consultation with appropriate faculty bodies, completes the **Preliminary Action Plan** based on suggestions and recommendations from the Review Committee Report. The Preliminary Action Plan should include specific action items to be completed over the next two years; action items should be prioritized. Each item should specify measures and performance standards, as well as an estimated completion date. The Preliminary Action Plan should be submitted to the Dean of Graduate Studies at least one week prior to the Action Plan Meeting.

The Action Plan Meeting will include the Dean of the College of Graduate Studies, the program director and the chair of the review committee. The purpose of the meeting is to discuss the Review Committee Report and agree upon a final action plan.

Action Plan Report: The final Action Plan Report is due to the Office of the Dean of Graduate Studies within one month after the Action Plan Meeting.

Two years after the conclusion of the review, the program director will submit a report to the Dean on progress made on each item identified in the Action Plan. A second Update Report may be requested at a later date if insufficient progress has been made.





COLLEGE OF GRADUATE STUDIES

**PROGRAM REVIEW
SELF-STUDY REPORT**

**(Due from the Program Director to the College of Graduate Studies Office by
MONTH/DAY)**

Date of Submission: _____

Program Name/Degree: _____

Program Director: _____

Endorsements

The undersigned attest that, to the best of their knowledge, the information contained in this report is accurate, complete, and reflects the best efforts of the program faculty, staff, and students to provide a detailed description of the current status of the graduate program under review.

Program Director

Signature

Department/Unit Head

Signature

SELF-STUDY REPORT

The Program Director is to prepare a self-study report using the following template. The completed self-study provides the College of Graduate Studies Program Evaluation Committee with a description and internal assessment of the program under review. The self-study assists the Program Evaluation Committee to understand, assess, and make recommendations about the program under review.

I. MISSION, GOALS, AND CONTEXT

A. Describe the program under review. Indicate the mission, nature, unique characteristics, goals, and objectives of the program including teaching, research, community engagement, and outreach activities. Explain how the program aligns with the mission of the University and the College of Graduate Studies. Identify the relationship of the program under review to other programs at NEOMED, especially in terms of mutual support, shared faculty, shared course requirements, and/or shared facilities.

B. Please complete the following table based on the last three academic years.

| | | |
|---|---------------|--|
| Graduate Student Enrollment | Masters: | |
| | Doctoral: | |
| Number of Graduate Degrees/Certificates Awarded | Certificates: | |
| | Masters: | |
| | Doctoral: | |
| Number of Adjunct Graduate Faculty | | |
| Number of Graduate Faculty | | |
| Number of Tenure-Track Faculty | | |
| Number of Full-time Non-Tenure-Track Faculty | | |
| Total Number of Graduate Assistantships Awarded | Masters: | |
| | Doctoral: | |
| Total Number of Other Student Stipends Awarded | Masters: | |
| | Doctoral: | |
| Provide Link to Program's Website | | |

II. CURRICULUM, FACULTY, STUDENTS, AND RESOURCES:

A. **Curriculum:** Summarize degree or certificate requirements and provide commentary on significant features of the curriculum. List all required core courses, elective courses, and total hours required for degree or certificate completion. The list of courses should provide specific course titles and numbers.

Curriculum Summary:

| Required Courses: | Elective Courses: |
|-------------------|-------------------|
| | |
| | |
| | |
| | |
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| | |
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| | |
| | |
| | |

Total hours required for degree/certificate completion: _____

B. **Faculty:** Complete the following table to list all faculty participants, their titles, percent effort (will follow faculty workload policy), academic home department and college, and an indication of their graduate faculty status.

| Faculty Name | Percent Effort | Date of Appt. | Status (e.g., tenure track) | Rank | Race/Ethnicity | Gender |
|--------------|----------------|---------------|-----------------------------|------|----------------|--------|
| | | | | | | |
| | | | | | | |
| | | | | | | |
| | | | | | | |

Submit an up-to-date curriculum vitae for each faculty member.

C. **Students Admitted:** Describe entrance requirements, if any, such as GPA; GRE; degree status (i.e., non-degree, degree, provisional); baccalaureate required, etc.

Complete the ethnicity and gender table below for current students.

| Race/Ethnicity | Male | Female |
|--|------|--------|
| Hispanic/Latino (one or more races) | | |
| One race, American Indian/Alaska Native | | |
| One race, Asian | | |
| One race, Black/African American | | |
| One race, Native Hawaiian/Other Pacific Islander | | |
| One race, White | | |
| More than one race (not Hispanic/Latino) | | |
| Ethnicity/race unknown or not stated | | |

Please respond to the following questions about students in your program. If not applicable, indicate that.

1. What resources do you provide to support the career development and placement of your students?
2. Describe program-arranged graduate student internship and external placements (in education, government, or private sector). What role do these placements have in your program? How is (1) student performance and (2) placement/internship quality assessed by your program? What changes, if any, have been made based on your evaluation process?
3. Are there persistent problems that students experience which inhibit their successful completion of the program? What strategies are employed by the program to remove these barriers to success?
4. What role do faculty play in the mentoring of students? How is faculty mentoring evaluated and what have you learned from these evaluations? What changes, if any, have been made based on your evaluation process?
5. How is student performance assessed? How is the assessment process evaluated and what have you learned from these evaluations?
6. How do you identify students who are not making progress? What support/counseling do you provide for these students?
7. What efforts have been made to support students who have special challenges such as those coming from underrepresented groups, different cultures or those with disabilities? Are support services (tutoring, advisement, interpreting) available for students?
8. What proportion of your students receive full (20 hours/week) assistantships? What are the average stipend amounts, ranges and standard deviations for these students? If you provide differential stipend amounts, what are your criteria for determining the amounts?
9. What proportion of your students receive half (10 hours/week) assistantships? What are the average stipend amounts, ranges and standard deviations for these students? If you provide differential stipend amounts, what are your criteria for determining the amounts?
10. What proportion of your students receive a full tuition waiver? What proportion receive a partial tuition waiver? What are your criteria for making these determinations?
11. Describe the duties performed by teaching assistants, research assistants and administrative assistants? How are graduate assistants prepared for and mentored in their duties?

- D. **Staff:** List support staff involved with the program and their role.
- E. **Resources:** Provide relevant information related to the financial support of the program, including the financial commitment of department(s) and college(s) devoted to this particular program.
- F. **Facilities:** Describe any special facilities that are required for the program, including laboratories, computer facilities, library facilities, or equipment needed for certificate delivery.

III. VIABILITY:

- A. **Course Enrollment:** List courses taken by students in the program during the last three years. Also, provide course enrollment figures and at least three examples of typical syllabi.
- B. **Program Enrollment:** Provide data, in tabular form, indicating the number of applicants, number of applicants admitted and enrolled, total enrollment, and number of individuals completing the program for each of the last three years (Appendix III).

| Total number of applicants | Total number of applicants admitted and enrolled | Total enrollment | Total number completing the program |
|----------------------------|--|------------------|-------------------------------------|
| | | | |

- C. **Enrollment Projections:** Identify trends that will influence enrollment over the next five years. Provide enrollment projections and indications of whether presently participating faculty and units will be able to support large projected increases in enrollment.

IV. ASSESSMENT:

- A. Summarize the principal elements that comprise the core of student assessment. Indicate how the elements provide useful information in assessment of student performance.
- B. Provide specific information on how assessment data are used to improve program quality.
- C. Provide information (e.g., survey data) on follow-up studies of graduates to indicate graduate satisfaction with the effectiveness of the educational experience. The surveys should include the results of exit interviews as well as responses of individuals at least three years' following receipt of the degree or Certificate.
- D. Identify strengths and weaknesses of the Degree or Certificate program, as well as any institutional or unit plans for removing weaknesses.