**Integrated Science Course**

**Course Name, Number**

**Prerequisites:**

**Course Offering(s):** Students will participate in this 4-week course [date(s) here].

**Course Administration**

Course Directors and contact information: XX

Administrative support: if available

**Course Description/Mission Statement:**

*How does this course advance foundational science?*

*How does this course advance clinical skills?*

**Course-Specific Learning Objectives**

*By the conclusion of this course, students should be able to:*

|  |  |
| --- | --- |
| **Learning Objective** | [**MEPOs**](https://nam04.safelinks.protection.outlook.com/?url=https%3A%2F%2Fwww.vanderbilt.edu%2Fcatalogs%2Fkuali%2Fsom-22-23.php%23%2Fcontent%2F626310c7017a7c12c2bee674&data=05%7C01%7Clatoya.m.ford%40vanderbilt.edu%7Cfa81834d620c4033ddd808da812e10fa%7Cba5a7f39e3be4ab3b45067fa80faecad%7C0%7C0%7C637964332098396525%7CUnknown%7CTWFpbGZsb3d8eyJWIjoiMC4wLjAwMDAiLCJQIjoiV2luMzIiLCJBTiI6Ik1haWwiLCJXVCI6Mn0%3D%7C3000%7C%7C%7C&sdata=MG8uCOFT8PVb86BXWWVtrQtL9qRUeVDk0B2d%2By5VylI%3D&reserved=0)**\*** |
| Add here; can add more rows if needed. |  |
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| *\*MEPOs=Medical Education Program Objectives:* [*https://www.vanderbilt.edu/catalogs/kuali/som-22-23.php#/content/626310c7017a7c12c2bee674*](https://nam04.safelinks.protection.outlook.com/?url=https%3A%2F%2Fwww.vanderbilt.edu%2Fcatalogs%2Fkuali%2Fsom-22-23.php%23%2Fcontent%2F626310c7017a7c12c2bee674&data=05%7C01%7Clatoya.m.ford%40vanderbilt.edu%7Cfa81834d620c4033ddd808da812e10fa%7Cba5a7f39e3be4ab3b45067fa80faecad%7C0%7C0%7C637964332098396525%7CUnknown%7CTWFpbGZsb3d8eyJWIjoiMC4wLjAwMDAiLCJQIjoiV2luMzIiLCJBTiI6Ik1haWwiLCJXVCI6Mn0%3D%7C3000%7C%7C%7C&sdata=MG8uCOFT8PVb86BXWWVtrQtL9qRUeVDk0B2d%2By5VylI%3D&reserved=0) | |

**Common ISC Learning Objectives**

*By the conclusion of this course, students should be able to:*

|  |  |
| --- | --- |
| **Learning Objective** | [**MEPOs**](https://nam04.safelinks.protection.outlook.com/?url=https%3A%2F%2Fwww.vanderbilt.edu%2Fcatalogs%2Fkuali%2Fsom-22-23.php%23%2Fcontent%2F626310c7017a7c12c2bee674&data=05%7C01%7Clatoya.m.ford%40vanderbilt.edu%7Cfa81834d620c4033ddd808da812e10fa%7Cba5a7f39e3be4ab3b45067fa80faecad%7C0%7C0%7C637964332098396525%7CUnknown%7CTWFpbGZsb3d8eyJWIjoiMC4wLjAwMDAiLCJQIjoiV2luMzIiLCJBTiI6Ik1haWwiLCJXVCI6Mn0%3D%7C3000%7C%7C%7C&sdata=MG8uCOFT8PVb86BXWWVtrQtL9qRUeVDk0B2d%2By5VylI%3D&reserved=0)**\*** |
| Demonstrate knowledge and understanding of the foundational science for the ISC course topics. \**This is the primary objective of the ISCs* | KP1, KP3 |
| Integrate foundational science knowledge into clinical scenarios through the exploration of patient evaluation (symptoms, diagnostic studies, and underlying pathophysiology) and management plan development. | PC1, PC2, PC3, KP1, KP3 |
| Model a commitment to continuous self-regulated learning as evidenced by the collection, analysis, interpretation, and implementation of newly acquired information. | KP3, PBLI1, PBLI2, PBLI3 |
| Display professional duty while demonstrating compassion and respect for all persons. | PR4 |
| Utilize effective communication strategies with patients, families, and healthcare colleagues, including the demonstration of sensitivity and responsiveness to persons of diverse identities. | IPCS1, IPCS2, IPCS3, PR2, PR3 |
| Function as an effective member of the patient care team. | IPCS3, SBP2, SBP3, PR3, PR4 |
| *\*MEPOs=Medical Education Program Objectives:* [*https://www.vanderbilt.edu/catalogs/kuali/som-22-23.php#/content/626310c7017a7c12c2bee674*](https://nam04.safelinks.protection.outlook.com/?url=https%3A%2F%2Fwww.vanderbilt.edu%2Fcatalogs%2Fkuali%2Fsom-22-23.php%23%2Fcontent%2F626310c7017a7c12c2bee674&data=05%7C01%7Clatoya.m.ford%40vanderbilt.edu%7Cfa81834d620c4033ddd808da812e10fa%7Cba5a7f39e3be4ab3b45067fa80faecad%7C0%7C0%7C637964332098396525%7CUnknown%7CTWFpbGZsb3d8eyJWIjoiMC4wLjAwMDAiLCJQIjoiV2luMzIiLCJBTiI6Ik1haWwiLCJXVCI6Mn0%3D%7C3000%7C%7C%7C&sdata=MG8uCOFT8PVb86BXWWVtrQtL9qRUeVDk0B2d%2By5VylI%3D&reserved=0) | |

**Course Materials**

All course materials and assignments will be made available on VSTAR ([vstar-learn.app.vanderbilt.edu](https://vstar-learn.app.vanderbilt.edu/)). If you cannot access this course in VSTAR, please contact the Immersion Phase Program Coordinator, Janie Pruitt, immediately. Due to copyright issues, we cannot post PDFs of articles directly in VSTAR Learn. Students will be responsible for downloading relevant materials and being prepared for class.

If you experience technical difficulties while taking a quiz/exam or uploading/posting an assignment in VSTAR Learn, please notify the course directors immediately. We will speak with IT to resolve the problem.

**Students in the ISCs are expected to follow the Vanderbilt University School of Medicine Honor Code. It is expected that all exams and quizzes are taken as individuals, accessing only authorized information during the exam/quiz, unless stated otherwise by the specific course director(s). Furthermore, it is expected that all presentations and written assignments are completed as individuals, unless stated otherwise by the course director(s).**

**Educational Activities**

**Educational Strategies**

Please add a description of the educational strategies that will be used to facilitate student achievement of the learning objectives (both common and course-specific objectives). Please be clear which activities are active, passive, or self-directed learning.

**Foundational Science Integration**

Please indicate how you intentionally *integrate* foundational science in the course, providing specific educational activities. As a reminder, integration refers to directly linking the foundational science with what students are seeing/learning in the clinical experience, not just creating proximity between foundational science and clinical concepts.

**Use of Primary Literature**

Please indicate how the primary literature is leveraged in your course (rationale and in what activities). There is no need to list the references here.

**Course Schedule**

Please provide your students with a schedule of course activities and specify which activities are mandatory as requested in the attendance policy.

**Assessments, Expectations, and Policies:**

**Student Assessment:**

The final grade in this course will be assigned on an honors/high pass/pass/fail (H/HP/P/F) basis. The course’s grades will address performance in five or six separate, but equally important, competency domains: Medical Knowledge, Patient Care, Interpersonal and Communication Skills, Practice-Based Learning and Improvement, Systems-Based Practice, and Professionalism. Grading of performance within each competency domain can be informed by a variety of assessment methods that may include quantitative scores and qualitative feedback.

* ISCs will use both **qualitative measures** (VUSM competency milestones) and **quantitative measures** (such as quizzes, examinations, presentations, and reflections).
* To pass a course, each student must pass both the **quantitative and qualitative measures**.
* To obtain honors, a student should demonstrate excellent performance in *all* aspects of the course

**Quantitative Assessments**

|  |  |
| --- | --- |
| *Activity* | *% of final quantitative grade* |
| Examinations | TBD by course |
| Quizzes | TBD by course |
| Student Projects, presentations | TBD by course |
| Other (modules, journal clubs, reflections, etc.) | TBD by course |

**Qualitative Assessments**

* Competency milestone data about each student should be collected from 2 unique observers (e.g. clinical faculty, residents, teaching faculty) who are able to assess student performance in key competencies during the activities of the course. ISCs are required to measure the competencies as defined in Table 2.
* For an in-depth description of each competency/milestone, please go to:

<https://medschool.vanderbilt.edu/ume/isc-milestones-students>

* Course directors will synthesize this input into a final, summative assessment for each competency domain (in gray below).

**Competency domains and milestones that are required for student assessment in the ISCs**

|  |  |  |
| --- | --- | --- |
| **COMPETENCY DOMAIN** |  | **COURSE ACTIVITY EVALUATED** |
| MEDICAL KNOWLEDGE | | |
| Integration | MK2a | TBD by course |
| Depth | MK2b | TBD by course |
| Analysis | MK7a | TBD by course |
| Inquiry | MK7b | TBD by course |
| Use of info resources | MK7c | TBD by course |
| PATIENT CARE |  |  |
| Thought process | PC2a | TBD by course |
| Self-knowledge | PC7a | TBD by course |
| INTERPERSONAL COMMUNICATION | | |
| Content of presentations to colleagues | IPCS7b.1 | TBD by course |
| PRACTICE-BASED LEARNING & IMPROVEMENT | | |
| Receptivity to feedback | PBLI3a | TBD by course |
| SYSTEMS BASED PRACTICE | | |
| Initiative and contribution to group efforts | SBP2a | TBD by course |
| PROFESSIONALISM | | |
| Professional duty | PR1b | TBD by course |

*Table 2*

Optional: Frequency of assessment and feedback of the above milestones:

|  |  |
| --- | --- |
| *When assessment occurs* | *Who assesses?* |
| Specific date or time period, like mid-course | Course Director, Clinical Faculty, Residents, Peer and/or Self? |
| Specific date or time period, like end-of-course | Course Director and Clinical Faculty (Residents optional) |

**Assigning a final grade**

Students’ final grades will use their performance on quantitative measures as a foundation for final grade assessment that should be adjusted, as appropriate, to reflect their performance on competency domains, using the Threshold/Target/Reach levels for milestones (<https://medschool.vanderbilt.edu/ume/isc-milestones-students>), as follows:

|  |  |  |
| --- | --- | --- |
| **Final Grade** | ***Quantitative Score*** | ***Summative Competency Ratings (Qualitative Score)***  *(6 domains assessed)* |
| *Risk of Failure*  *(course director discretion)* | <70% | Any Sub-Threshold  OR  >2 Thresholds |
| *Pass* | At least 70% | No more than 2 Thresholds  All others at Target or above |
| *High Pass* | At least 80% | At least 3 Reaches  All others at Target |
| *Honors* | At least 90% | Nothing below Target  5 Reaches |

**Student grievance concerning grades**

Students can seek redress of a problem with a grade no later than four weeks after the grade is released. Students with a grievance should confer directly with the ISC Directors. Every effort should be made to resolve the problem fairly and promptly at this level. If the student and ISC Directors cannot resolve the problem through discussion, the Medical student can formally request an appeal, within two weeks of talking with the course director, from the Associate Dean for Medical Student Affairs (ADMSA). Appeal will prompt a review of the course’s assessment practices by the Standing Assessment Committee, as well as a review of the individual student’s situation by the ADMSA, the Associate Dean for Undergraduate Medical Education, and a neutral faculty reviewer. If resolution is still not achieved, the ADMSA will make a recommendation to the Senior Associate Dean for Health Sciences Education, who will make the final decision.

**Course Policies**

Please include any course-specific policies such as attendance, laptop use, cell phone use, class preparation, etc.