

Virginia Commonwealth University
School of Medicine

GUIDE

to

Independent Study EPID 693

**Department of
Epidemiology and Community Health**

A. Introduction

The Independent study project provides an opportunity for graduate students in the Department of Epidemiology and Community Health to learn more about a specific topic of public health interest not currently included in existing VCU course offerings. Study is conducted under the guidance of a VCU faculty mentor who will assist the student in planning the study and determining evaluation procedures. (Note that the student's faculty advisor may also serve as mentor for the Independent Study if the topic selected is within his/her area of expertise.)

B. Selecting a Topic

The topic of interest must be one pertaining to public health (see the Ten Essential Public Health Functions listed in *Appendix A*). The independent study topic should be selected in consultation with the faculty advisor to ensure that the proposed study is relevant to the student's career goals. The faculty mentor must agree to be available to the student for consultation throughout the semester.

C. Credit Hours

The number of independent study credit hours may range between 1 and 3 credits, and the number should be determined by the student's academic advisor and the director of graduate programs. A review paper summarizing recent literature on a topic of particular interest to the student is generally worth one credit, whereas a scholarly work, including locating, organizing, integrating and critically reviewing a large body of literature may be worth up to 3 credit hours. Related work might involve data collection to identify community health problems, or evaluation of an ongoing community intervention program. A proposed independent study may not exceed 3 credit hours. Typically a student may not register for more than 3 credits of independent study. Independent study credits will count as elective credit toward graduation requirements.

D. Independent Study Learning Contract

Students must complete the Independent Study Learning Contract (see *Appendix B*) prior to registering for the course. The contract must be reviewed and approved by the student's faculty advisor, the faculty mentor, and the Director of Graduate Programs. The contract should not exceed 2-3 pages and must include the following sections:

1. **Title:** State the title of your independent study.
2. **Statement of Interest:** State briefly the relevance of the study to your career goals.
3. **Objectives:** Describe what you expect to learn and accomplish through this study. Objectives must be both observable and measurable.
4. **Methods:** Describe the specific steps to be taken to meet your objectives; e.g., readings from selected texts and scholarly literature, data collection, analysis of data, etc.

5. **Outcome:** Describe the final product(s) of the independent study, such as a scholarly research paper, a slide presentation, a detailed description and findings of a data analysis project, or learning new software applications or interview techniques.
6. **Evaluation Criteria:** Consult with your faculty advisor and your faculty mentor on criteria to be used to evaluate your work for the assignment of a grade. Your faculty advisor should take the lead in establishing these criteria, obtaining input from you and from your faculty mentor, but the criteria must be acceptable to all parties.

Evaluation criteria should include percentage of the course grade for each criterion and should apply not only to the concrete outcome(s) of the project as described in item 5 (e.g., a research paper), but also to less tenable outcomes such as a student's mastery of new skills (eg, software applications or survey questionnaire development).

7. **Timeline:** Construct a semester schedule for completing each individual task related to the independent study. Model the timeline after those found in a typical course syllabus: set a goal or task to complete for each week of the semester. For example, you may work with your faculty advisor and your faculty mentor to set a schedule for completing selected readings in texts or journals or to complete other specific tasks. Include the number of contact hours for meeting with the faculty mentor and the number of credits proposed.
8. **Contract Approval:** Obtain signatures of your faculty advisor, your faculty mentor, and the Graduate Program Director on your independent study contract. **You will not be permitted to register for an independent study project before completing an Independent Study Learning Contract and obtaining appropriate signatures.** The due date for submission of the contract is the last day of classes of the semester prior to the semester you plan to register for the Independent Study.
9. **Registration:** Submit to the Graduate Program Coordinator the signed contract along with the registration form. Register for the Independent Study course as EPID 693-001.

E. Evaluation

A draft of the project outcome(s) must be submitted to the faculty mentor and the faculty advisor at least two weeks prior to the end of the semester. The structure of the draft will depend on the type of project conducted. It may be a scholarly research paper, a slide presentation, findings of a data analysis project, or a description of acquired skills. Revisions should be made as agreed upon by the student and advisors, and a final version submitted to the Graduate Program Director. The faculty advisor will then assign

a grade for the project based on the evaluation criteria stated in the independent study contract (see section D.6 above).

F. Grading

To obtain final credit and a grade for your independent study, you must submit to your faculty advisor and your faculty mentor the outcome materials specified in the contract. All work must be submitted no later than the last week of classes in the semester, in order to give your advisors adequate time to evaluate your work. The faculty advisor will assign the final grade after obtaining input from the faculty mentor.

G. Roles of Student, Faculty Advisor, and Faculty Mentor

1. **Student:** The student is responsible for contacting his or her faculty advisor and selecting a faculty mentor. The student will work with the advisor and mentor to prepare the contract, obtain approval signatures, register for the course, and meet the weekly schedule as designated on the timeline. The student must submit all required work for a final grade no later than the last week of classes.
2. **Faculty Advisor:** The faculty advisor is responsible for helping the student select a faculty mentor with expertise in the topic of interest. He or she will help the student develop the research contract including the timeline, work with the faculty mentor and the student to establish criteria by which the project will be evaluated, and evaluate the student's work in concert with the faculty mentor. The faculty advisor should serve as a facilitator to the student and meet with student at least on a monthly basis to provide the necessary support and to direct the student to relevant resources. The faculty advisor is responsible for assigning the final grade and submitting the final grade to the Graduate Program Coordinator by the last day of final exam week.
3. **Faculty Mentor:** The faculty mentor is responsible for guiding the student in the study of the topic, assisting in preparing a timeline, meeting weekly with the student to discuss progress, working with the advisor as required to develop criteria for evaluating the student's work, and providing input to the student's advisor on the assignment of a grade for the final product.

APPENDIX A

THE TEN ESSENTIAL PUBLIC HEALTH SERVICES*

- Monitor health status to identify community health problems
- Diagnose and investigate health problems and health hazards in the community
- Inform, educate, and empower people about health issues
- Mobilize community partnerships to identify and solve health problems
- Develop policies and plans that support individual and community health effort
- Enforce law and regulations that protect health and ensure safety
- Link people to needed personal health services and assure the provision of health care when otherwise unavailable
- Assure a competent public health and personal health care workforce
- Evaluate effectiveness, accessibility, and quality of personal and population-based health services
- Research for new insights and innovative solutions to health problems

**Institutes of Medicine, Essential Public Health Services Work Group of the Core Public Health Functions Steering Committee, 1994. <www.health.gov/phfunctions/public.htm>*

Appendix B

Independent Study Learning Contract
Department of Epidemiology and Community Health

Student name: _____ E-mail address: _____

Street address: _____

Home phone: () _____ Work phone: () _____ Fax: () _____

Number of semester hours (1-3): _____ Semester: _____ Year: _____

A. PROJECT TITLE:

B. RELEVANCE OF STUDY TO CAREER GOALS:

C. SIGNIFICANCE OF TOPIC TO PUBLIC HEALTH (See Appendix A):

D. OBJECTIVES (describe what you expect to learn and accomplish; must be both observable and measurable):

E. DESCRIPTION OF METHODS (describe the specific steps toward meeting your objectives):

F. OUTCOME:

G. EVALUATION CRITERIA:

H. PROPOSED SCHEDULE (construct a weekly timeline/syllabus for the semester, including meetings with your faculty mentor):

SIGNATURES

Faculty Mentor

Name: _____ Title: _____

Address: _____

E-mail: _____ Phone: _____

Field of expertise: _____

Faculty Advisor:

Name: _____

E-mail: _____ Phone: _____

Student:

_____ Date: _____

Graduate Program Director:

_____ Date: _____

Graduate Program Coordinator:

_____ Date: _____

sample

Appendix B

Independent Study Learning Contract
Department of Epidemiology and Community Health

Student name: _____ E-mail address: _____

Street address: _____

Home phone: () _____ Work phone: () _____ Fax: () _____

Number of semester hours (1-3): 3 Semester: _____ Year: _____

A. PROJECT TITLE:

Disparities in pediatric oral health

B. RELEVANCE OF STUDY TO YOUR CAREER GOALS:

I am interested in a career involving pediatric oral health; VCU does not offer courses in this area.

C. SIGNIFICANCE OF TOPIC TO PUBLIC HEALTH (See Appendix A):

Identify oral health problems in children.

Inform and educate people about pediatric oral health issues.

D. OBJECTIVES (describe what you expect to learn and accomplish; must be both observable and measurable):

Demonstrate understanding of etiology, prevalence, and risk factors for developing pediatric oral diseases; identify barriers to care; evaluate the adequacy of dental insurance available to poor children; become knowledgeable of current issues related to pediatric oral health.

E. DESCRIPTION OF METHODS (describe the specific steps toward meeting your objectives):

Conduct literature reviews and summarize relevant articles; prepare questions for discussion with faculty mentor; meet weekly with preceptor; attend weekly seminars in Dept of Pediatric Dentistry.

F. OUTCOME:

The final product will be a comprehensive review integrating all articles, resulting in a scholarly analysis and examination of the current issues in pediatric oral health, including a report of the evaluation of dental insurance available to poor children

G. EVALUATION CRITERIA:

Evaluation criteria include attendance at weekly seminars and attendance at article reviews with faculty mentor; demonstration of knowledge in written reports, including the final project report.

H. PROPOSED SCHEDULE (construct a weekly timeline for the semester, including meetings with your faculty mentor):

Independent Study Class Schedule
Disparities in Pediatric Oral Health:
Public Health Impact and Prevention

Weeks 1-2:

- Review Pediatric Oral Health
 - What dental diseases affect children?
 - What are the causes and etiology of those diseases?
 - What is the negative impact of oral diseases on public health, including a review of other diseases that have been associated with oral health problems, such as diabetes, heart and lung disease, stroke, and low birth weight premature births.

Weeks 3-4:

- Assess the Scope of the Problem
 - Prevalence/Incidence of oral pediatric health problems compared to the adult population.
 - At risk populations: Which groups (by SES, race) suffer disproportionately from poor oral health?
 - What are the risk factors for developing oral caries?
 - Which behaviors are associated with increased risk of oral caries (bottle at bedtime with milk or juice instead of water, poor nutrition, formula vs. breast feeding).

Weeks 5-6:

- Dental Insurance and Access to Dental Care
 - Do children have dental insurance? What is the major type of insurance that is available to low-income children? How about children of working class families?
 - What is the structure of dental benefits available under Medicaid? What procedures are covered?
 - What are the major problems impacting utilization of dental benefits available with Medicaid and SCHIP? (Why do so few eligible children take advantage of these benefits?)
 - Compare access and utilization among different populations.
 - Impact on oral health outcomes.

- Problems and Proposed Solutions. (How are states trying to improve utilization of dental benefits available from publicly funded insurance?)

Weeks 7-8:

- Issues and Strategies unique to treating pediatric patients
 - Are pediatric dentists necessary? Why are general dentists unwilling to treat pediatric patients?
 - Are pediatric patients available? How are they dispersed throughout the country? How many of them are there? Is this changing?
 - Are pediatric dentists more or less likely to accept Medicaid and SCHIP than are general dentists?
 - How do these issues impact the state of oral health among pediatric patients?
- Collaborations between pediatricians and pediatric dentists
 - Are pediatricians educated about oral health problems?
 - Do pediatricians encourage preventive dental visits early or wait until the child needs an emergency procedure in response to pain?
 - How are collaborative relationships between pediatricians and dentists changing? What efforts are being made to improve this collaboration?
 - What are the obstacles to this collaboration?

Weeks 9-10:

- Preventive Efforts
 - Water Fluoridation (How successful has this public health initiative been at preventing oral health complications? Has all water been fluoridated? Why/why not? How do those populations who do not have fluoridated water compare to those who do?)
 - How effective have sealants been in preventing oral cavities? Do all children receive them? Is this changing?
 - What educational efforts have been made to educate parents and children about the importance of maintaining good dental hygiene at home and making regular visits to the dentist?
 - What kind of behavior modification is being used to encourage such behaviors that are known to reduce risk of oral caries such as decreasing the consumption of sugary drinks and breast feeding versus formula feeding? Have these efforts been successful? Why/why not?
 - Which populations are targeted by these efforts?

Weeks 11-12: Complete Final Project