

**DEPARTMENT REPORT
OF
PROGRAM LEARNING OUTCOMES ASSESSMENT**

Department: Dietetics/Nutrition Management

Program (Degree): Dietetic Technology (DIT)

Type of Degree: X AAS AA AS ATS AIS

Chairperson: Nora Schaefer Date: 01/09/06

Person(s) Interviewed: Nora Schaefer

- I. Program Curriculum:** A description of the basis for the program curriculum (i.e., how it is derived and validated). Include accreditation organizations, advisory committees or external groups that influence curriculum. Describe curriculum review activities including the review of course master syllabi.*

The Commission on Accreditation of Dietetics Education (CADE) awarded the Sinclair DIT program a ten (10) year accreditation status until the year 2013. The next review of the program will be in 2008, the five-year interval of the ten-year accreditation period, when the Program Assessment Report (PAR) is due.

The DIT curriculum with 110 credit hours exceeds the educational requirements of SCC. Its curriculum was further developed to meet the ADA foundation, knowledge, skills and competencies for entry-level dietetic technicians. Curriculum revisions are responsive to trends in health care delivery, reflect advancements in the discipline, and modifications in accreditation standards. Input is obtained from the local dietetics community, faculty, graduates, and students to ascertain program effectiveness. Based on local, state and national trends, the latest major program revision occurred in 2005 and includes collaboration with Culinary Arts and Dining Assistant Training.

The DIT Advisory Committee, which meets twice a year, continues to be active in overseeing the program, assuring current needs are met, and that quality instruction is provided. The Committee includes program graduates, registered dietitians, registered technicians, certified dietary managers, consultants, and administrators from area hospitals, nursing homes and community agencies and current students, divisional counselors, dean and DIT faculty.

- II. Program Learning Outcomes:** A description of what you intend for students to know (cognitive), think/feel (affective), or do (psychomotor), when they have completed your degree program. A suggested manageable number of outcomes should be in the range of five to ten. Describe Program Learning Outcomes review activities.*

The Dietetic Technology (DIT) program learning outcomes have been reviewed and continue compliance with the Standards of the Dietetics Education Document published by the American Dietetic Association (ADA). An entry-level graduate with an Associate of Applied Science Degree in Dietetics & Nutrition Management from Sinclair Community College will be able to:

Learning Outcomes	Related Courses
1. Demonstrate professional practice in accordance with the American Dietetic Association and participate in life long learning.	DIT 109, 112, 129, 135, 137, 205, 207, 216, 218, 221, 222, 223, 224, 225, 226, 227, 228, 236, 240, 255; CHE 120, 122; ALH 103, 104; ENG 112; COM 206; PSY 119, SOC 111; HUM-
2. Translate nutritional needs into food choices and menus for all people, including those of diverse cultures, ethnicities, and religions.	DIT 109, 129, 135, 137, 205, 207, 216, 218, 221, 222, 223, 224, 225, 226, 227, 228, 236, 240, 255; ENG 111, 112; MAT 101; ALH 103, ALH 104; PSY 119; SOC 111; COM 206; HUM-
3. Document nutrition and related data in the medical record and plan of care for clients/patients, communicating these to their families and the health team providers.	DIT 112, 129, 135, 207, 216, 218, 221, 222, 223, 224, 225, 226, 227, 228, 255; CHE 120, 122; ALH 103, 104; ENG 111, 112; COM 206; PSY 119, SOC 111; HUM-
4. Design, implement and maintain community-based food and nutrition programs	DIT 129, 135, 137, 205, 207, 216, 218, 221, 222, 223, 225, 226, 227, 228, 236, 240, 255; ENG 111, 112; PSY 119; COM 206; SOC 111, 112, HUM
5. Monitor the production, distribution, and service of food that meets the established criteria for nutrition, sanitation/safety, cost, and consumer acceptance.	DIT 129, 135, 137, 205, 207, 216, 218, 224, 240, 236, 255; MAT 101, ENG 111, 112; COM 206; SOC 111; PSY 119, HUM
6. Educate clients/patients/consumers/employees in health promotion, disease prevention, medical nutrition therapy, and food system management using effective oral, written, and other nonverbal communication.	DIT 109, 112, 129, 135, 137, 205, 207, 216, 218, 221, 222, 223, 224, 225, 226, 227, 228, 236, 240, 255; CHE 120, 122; ALH 103, 104; ENG 112; COM 206; PSY 119, SOC 111; HUM-

III. **Assessment Method(s)**: A measurable indicator of success in attaining the stated learning outcome(s). The methodology should be both reliable and valid. Please describe in detail.

- a. Formative Assessment Method(s) and Description: a measurable indicator of student in-progress success in attaining the stated learning outcome(s).

Formative assessment is shared with students through discussion, abstract presentations, nutrition education modules, self-reflective journals, portfolio writing, case studies, critical thinking exercises, nutritional assessments, care plans, menu writing, recipe standardization, production schedules, purchase orders, budget development and food safety and sanitation practices,

Each DIT student is assigned a number of topics in professional journals. Articles of his/her choice are read, abstracts written, and presented to the class orally. Peer groups and instructors provide critiques.

The clinical/directed practice component of the DIT program is essential. A total of 456 hours, integrated with the didactics, are completed through health care institutions and government agencies. The community dietetic professionals provide practicum sites and preceptors for DIT majors. Students must successfully complete each segment for clinical/directed practice prior to advancing to the next level.

Evaluation is provided by the dietetics instructor, the preceptor, and through student self-examination instruments including self-reflective journals, and portfolio writing. At the end of each practicum rotation, an evaluation is conducted by the preceptor who assesses the student behavior (affective) and also emphasizes the student ability to demonstrate skills and competencies. Students also complete a self evaluation and meet with the preceptor to discuss strengths and weaknesses. In addition, faculty informally discusses student progress at department meetings. If deficiencies are noted a mid quarter evaluation is conducted with the student to discuss deficiencies and propose interventions for improvement. The portfolio displays activities and skills performed in the clinical, management, community, and nutrition education areas. Journal writing is designed to give students the opportunity to explore their experiences, examine their thoughts and feelings, and evaluate professional practice issues discussed in class.

Students develop teaching modules for programs with Head Start, Dayton Public Schools, Healthy Dayton Initiative, Extension Service, and Senior Citizens Centers. Instructors, preceptors, and peer groups provide formative feedback as students develop behavioral objectives, course content, and method of instruction, materials, and the evaluation process. These community service activities combined with Allied Health core courses

promote DIT student interaction with Culinary Arts and Allied Health faculty and students.

Mock and actual case studies on patients, requiring basic and medical nutrition therapies, are provided to the students in an effort to develop their problem solving and critical thinking skills. In the DIT 223 Medical Nutrition Therapy capstone course, students work in groups of three to four and choose a disease they are interested in exploring. The case study introduces the student to life-like situations in the clinical setting and is presented both orally and in written form. The case studies provide a broader knowledge base and enable the student to apply diet counseling strategies.

Formative feedback is provided as students complete nutritional assessments, resident assessment protocols, and care plans which are essential to each of the DIT medical nutrition therapy courses. Additionally, completing the minimum data sets (MDS 2.0) in health care instruction is required. In most instances future employment is based on the graduate's ability to provide this part of clinical service.

DIT faculty formally contacts each preceptor during the quarter to set up a time to conduct a site visit. During the visit, preceptor needs and student progress are addressed.

- b. Summative Assessment Method(s) and Description: a measurable indicator of end-of-program success in attaining the stated program learning outcome(s).

Summative assessment includes regularly scheduled written examinations. Two to four written tests and comprehensive examinations per didactic course are administered. The comprehensive examinations at the culmination of each DIT course cover materials in previous courses. A final grade of "C" or better must be earned.

Summative evaluation also includes final grades received on projects, assignments, education modules, nutritional assessments, care plans, and evaluations completed throughout the curriculum. These exercises measure demonstrated ability of core competencies required for entry-level dietetic technicians.

Dietetics Seminar (DIT 255) a two credit capstone course is required of all DIT majors in the last quarter prior to graduation. It includes a pre and post-test computerized comprehensive examination covering the areas of medical nutrition therapy, community nutrition, food service management and nutritional education. Successful completion with a grade of "C" or better is required. The computerized examinations include multiple-choice questions and case studies. These examinations are later used as the basis for a review class conducted by the DIT department, prior to students writing for the National Examination.

The Commission on Dietetic Registration (CDR) provides testing dates for students to write for the National Examination. Upon successful completion of the CDR Examination, graduates may use the DTR initials after their names (i.e. Teresa Messer, DTR).

IV. Results: A description of the actual results of overall student performance gathered from the summative assessment(s). (see III.b.)

Overall student performance has been impressive as evidenced by DIT graduates being employed in responsible positions with competitive salaries. The employing agencies include work in hospitals, nursing homes, health care institutions, government agencies, as entrepreneurs, at consulting firms and institutions of higher education.

Annually and on the fifth year, the Commission on Dietetic Registration (CDR) provides the Department Chair with the test scores of graduates who write for the National DTR Examination. The CDR goal is to have 80 percent of the graduates over a five year period, pass the DTR examination on their first attempt at test-taking. In 1999 the paper and pencil examination was replaced with computer testing, thus eliminating specific test dates previously offered in April and October. Graduates now have the opportunity to write for the examination at any time after graduation.

Due to introduction of the computerized testing processes (1999) and student procrastination, pass rates of DIT graduates taking the National DTR examination have dropped from 85-90% to 80-85%. Despite this drop, results still indicate that students continue to achieve 7-10 points over the national averages in all test domains. In 2003, pass rates were expected to improve due to implementation of a DIT 255 course revision and summer review class. However, 2004 test results continue to indicate that students have difficulty passing the foodservice system and management domain sections of the exam. During 2005, the curriculum was revised increasing course content in the foodservice systems and management domains. Pass rates are expected to improve due to these current changes. Over the years, three graduates have obtained the highest possible mark of 99% on their individual examinations. Some students are also electing not to take the exam at all which is their option. A decline in test taking appears to be a national trend since there are no specific testing dates, and graduates are not focused to write for the examination. This trend is expecting to improve since more employers are expecting graduates to be registered prior to hiring.

Many of Sinclair's DTR graduates transfer to both in-state and out-of-state four-year institutions and have shown great success in completing their higher education goals. For those students not electing to transfer to a four-year institution, graduates job placement is excellent. Typically, 90-100% of the DIT students have part and full time employment within three to six months of graduation. Future job placement will also depend on how quickly a student becomes registered following graduation. Students are eligible to take the DTR exam approximately 45 days post graduation. Employer feedback, both formally and informally, indicate that SCC graduates perform well and are competent technicians.

- V. **Analysis/Actions:** From analysis of your summative assessment results, do you plan to or have you made any adjustments to your program learning outcomes, methodologies, curriculum, etc.? If yes, describe. If no, explain.

During spring of 2005 a DIT program revision was approved increasing 109 credits to 110 credits. The rationale for this revision was to increase course content within the curriculum in the following DT domains covered on the National DTR Exam; Food Service System/Safety (domain 4) and Management (domain 5) and decrease course content within the curriculum in the following DT domains; Food & Nutrition (domain 1) Nutrition Service/Systems (domain 2), and Education & Research (domain 3). Replace DIT 205/207 with HMT 112/113. This will provide students the opportunity to demonstrate basic food preparation skills, operate kitchen equipment in a quantity food lab environment, and collaborate with culinary arts students.

A two day seminar has been developed and implemented during summer quarter to prepare students for the DTR national exam. Preceptors from the community are recruited to teach twelve of the sixteen hours. Students are encouraged to sit for the DTR national exam within 30 days following the review session.

Concerns related to the directed practice component will be solicited through a strengths, weaknesses, opportunities, and threats (SWOT) analysis. Instructors, preceptors and students will be included in the problem-solving process. The employment of faculty with practitioner experiences has added to the quality of instruction in the DIT program.

Formal articulation agreements have been developed with the Ohio State Dietetics program (spring 2002) and University of Cincinnati (spring 2005). Currently formal articulation agreements are being explored with the University of Dayton and New Jersey School of Dentistry and Medicine (online program). At this time, there is a verbal working agreement with the University of Dayton using Sinclair resources such as the food lab and courses to supplement their program.

- VI. **General Education:** A description of where and how within the major the three primary general education outcomes* (communication, thinking, values/citizenship/community) are assessed.

- a. **Where within the major do you assess written communication? Describe the assessment method(s) used. Describe assessment results if available.**

Every DIT course incorporates writing practices through examinations, written assignments and projects. All written assignments are evaluated for grammar, spelling, logic, and content. Examinations in Principles of Nutrition (DIT 129), Nutrition in the Lifecycle (DIT 135) and Medical Nutrition Therapy (DIT 221/222/223) courses incorporate writing skills typically through short answer essay questions.

Case studies, portfolio and journalizing are an integral part of the program. The case study introduces the student to life-like situations in the clinical setting. In DIT 223 (Medical Nutrition Therapy) students work in groups of two to three and choose a disease they are interested in exploring. Each case study is presented both orally and in written form. Each case study must include bibliography with a minimum of three references (one must include an article from a recent professional journal and one must include a research article from the internet). Copies of articles must be submitted with the written case studies. Students are to refer to each individual case study for specific grading criteria.

The portfolio is designed to showcase the student's accomplishments during the dietetic program and represents a marketable tool. Each student displays in writing the activities and skills performed in the clinical, community, management, and nutrition education areas. This is accomplished in the following courses: DIT109135/224/ 226 /227/228/218/237. Guidelines to complete specific objectives in the various parts of the portfolio are provided in the designated dietetic courses. The student and instructor review the portfolio on a continual basis as separate parts are being completed. Content of each part is included as part of the course evaluation. The last part of the portfolio is completed in DIT 255 (capstone course) and a final evaluation is performed.

Students participate in journal writing throughout their clinical rotation (DIT 226/227/228). The written assignment is designed to give students the opportunity to explore their experiences and examine their thoughts and feelings, and evaluate professional practice issues discussed in class.

**b. Where within the major do you assess oral communication?
Describe the assessment method(s) used. Describe assessment results if available.**

Interpersonal communication skills are necessary in the dietetics practice. The dietetics practitioner, being part of a team of health professionals, must be able to participate in the total care of individuals and groups. Program-specific communication skills are assessed within the DIT classes and clinical/directed practice settings. During clinical practicum experiences, students provide counseling on medical nutrition therapy with supervision from faculty and preceptors. A minimum of six oral presentations of twenty minutes each are required in the program and outlined below.

In the DIT135 Nutrition throughout the Lifecycle class interviews are conducted by students with a pregnant woman, parent with a preschool child, adolescent, young adult and elderly person. Each student participates in the interview process. Prior to the interview, the students have practiced interview techniques through role-playing. After the interview, students are divided into groups of four and become experts in one of the four areas of the nutritional assessment process. With each new interview the students switch their expert topic so they have a chance to be experts on all areas of the nutritional assessment.

In the DIT225 Education Methods and Materials class, students orally present a nutrition education topic to the class. During each presentation the student is videotaped by a fellow classmate for critique and evaluation. Each student is also required to use the multimedia equipment during their presentation.

In the DIT 240 Food and Culture class, students work in groups of three or four and are assigned a specific culture to research and present to the class. Guest speakers, who are part of the culture, may be invited and included in the presentation (skit, talk show or food expert). Students are also required to prepare food and submit recipes from the culture for the class to taste and sample.

In the DIT 224 Community Nutrition class, students present a 20 minute nutrition interactive education session to children 3-5 years old in Headstart Programs. The teacher aids assigned to the classroom completes an evaluation form that critiques the oral presentation.

In the DIT 137 Food Safety and Sanitation course, students present a 20 minute sanitation topic to the class and in DIT 218 management practicum students present a sanitation in-service to foodservice employees. Preceptors complete an evaluation for critique.

In the DIT 223 course, students work in groups of two or three and submit one written case study. In addition, an oral presentation is also given. All oral presentations will include diet therapy guidelines appropriate for the assigned disease disorder. Use of audiovisual equipment is expected to explain diet therapy guidelines to the class. Diet therapy guidelines are to be explained in detail. Students are to refer to each individual case study for specific grading criteria

c. Where within the major do you assess thinking? Thinking might include inventing new problems, seeing relationships and/or implications, respecting other approaches, demonstrating clarity and/or integrity, or recognizing assumptions. Describe the assessment method(s) used. Describe assessment results if available.

Problem solving and critical thinking skills are first addressed in the classroom and then in actual situations at the clinical sites. Evaluation is accomplished through the use of comprehensive patient/client assessments and the team care plans.

Case studies are used in the classroom as well as in the clinical sites. Group work allows students to be aware of individual strengths and weaknesses. Respect for one another views is demonstrated, and in these team settings, positive values are evident.

In Medical Nutrition Therapy (DIT 223), each student completes a critical thinking exercise packet worth 200 points. Each separate exercise addresses a specific medical condition and is worth 40 points. The grading criteria for each exercise is specified in the packet

During the clinical rotation at Children's Medical Center (DIT 228), students practice critical thinking skills by completing an exercise in the neonatal nursery and cystic fibrosis clinic. Students' collect data, communicate with the patients, family, and multiprofessional team and then forecast a nutrition plan.

d. Where within the major do you assess values/citizenship/community? These activities might include behaviors, perspective, awareness, responsibility, teamwork, ethical/professional standards, service learning or community participation. Describe the assessment method(s) used. Describe assessment results if available.

Being a part of the health care delivery team, each DIT graduate must be ethical in the program of her/his responsibilities. The value of inter-citizenship and ethics is emphasized in the program. Service Learning is incorporated into clinical rotations focusing on civic responsibility. Values such as trust, honesty, discipline, loyalty, integrity, respect, and risk-taking are encouraged. The faculty and staff provide exemplary examples of these values.

During the DIT109 (Introduction to Dietetics) students are introduced to the ADA Code of Ethics and Professional Standards. Practicum experiences provide students the opportunity to consider and apply issues of values and ethics to service projects. In particular, Community Nutrition (DIT 224) exposes students to issues of cultural/social/gender diversity. Student's compliance to ethical standards is evaluated throughout practicum rotations. Evaluations are completed by faculty and preceptors and discussed with students at the end of each quarter. Students are provided the opportunity to make comments on their evaluations and are required to sign the forms.

Students participate in journal writing throughout their clinical rotation (DIT 226/227/228). Entries are to describe any clinical achievement, insight, issue or concern. Students are encouraged to reflect upon the meaning of the situation to them, describe how it feels, what frustrations are inherent in the situation and what they might have done or how this experience will change their future behavior. To protect confidentiality, only initials are to be used when referring to a patient or client. Each journal entry should be a minimum of one page and specific grading criteria is provided in the course syllabus.